Annexes A–F to: State of nature in the EU

Results from reporting under the nature directives 2007–2012





European Environment Agency

Annex A General

Table A.1 Pressure and threat categories used for Article 12 & 17 reporting, level 1 in full and examples of levels 2 and 3

Level 1		Level	2 (part)	Level 3 (part)		
Code	Name	A01	Agricultural cultivation		Agricultural	
А	Agriculture	402	Modification of cultivation	A02.01	intensification	
В	Forestry	A02 A03	practices Mowing or cutting grasslands	A02.02	Crop change Grassland removal for	
0	Mining, quarrying &	A04	Grazing by livestock	A02.03	arable land	
<u>с</u> D	energy production Transportation & service infrastructure	A05	Farming and breeding of livestock	-		
<u>Б</u>	Urbanisation, residential & commercial development	A06	Crops of annuals & perennials (non-timber)			
<u> </u>	Use of living resources	A07	Use of 'pesticides' in agriculture			
F	(other than agriculture and forestry)	A08	Fertilisation in agriculture	-		
	Disturbances due to	A09	Irrigation in agriculture	-		
G	human activities	A10	Restructuring agricultural parcels			
Н	Pollution	A11	Other agriculture activities	-		
I	Invasive and introduced species			-		
J	Modification of natural conditions					
к	Natural processes (excluding catastrophes)					
L	Geological events, natural catastrophes					
М	Climate change					
Х	No pressures or threats					
ХО	Threats and pressures from outside the Member State					
XE	Threats and pressures from outside the EU territory					
U	Unknown threat or pressure					

Notes: To avoid very long lists of pressures and threats, the total number of data entries per individual bird, habitat or species assessment is limited to a **maximum of 20**. Moreover, for pressures and threats ranked as of high importance the number of data entries is limited to a **maximum of 5** and use of Level 2 categories is recommended (for example J02 'human induced changes in hydraulic conditions').

Annex B (Chapter 2)

Table B.1 Species for which EU trends in winter were assessed (n = 81)

Anas acuta Anas clypeata Anas crecca Anas penelope Anas platyrhynchos Anas strepera Anser albifrons albifrons Anser albifrons flavirostris Anser anser Anser brachyrhynchus Anser erythropus Anser fabalis Aquila adalberti Arenaria interpres Aythya ferina Aythya fuligula Aythya marila Aythya nyroca Branta bernicla Branta leucopsis Branta ruficollis Bucephala clangula Calidris alba Calidris alpina Calidris canutus Calidris ferruginea Calidris maritima

Calidris minuta Casmerodius albus Charadrius alexandrinus Charadrius hiaticula Charadrius leschenaultii Clangula hyemalis Cygnus columbianus Cygnus cygnus Cygnus olor Egretta garzetta Fulica atra Fulica cristata Gavia adamsii Gavia arctica Gavia immer Gavia stellata Grus grus Haematopus ostralegus Haliaeetus albicilla Himantopus himantopus Limosa lapponica Limosa limosa Marmaronetta angustirostris Melanitta fusca Melanitta nigra Mergellus albellus Mergus merganser

Mergus serrator Milvus milvus Netta rufina Numenius arquata Numenius phaeopus Numenius tenuirostris Otis tarda Oxyura leucocephala Pelecanus crispus Pelecanus onocrotalus Phalacrocorax carbo Phalacrocorax pygmeus Phoenicopterus roseus Platalea leucorodia Pluvialis apricaria Pluvialis squatarola Podiceps auritus Podiceps cristatus Podiceps nigricollis Polysticta stelleri Recurvirostra avosetta Somateria mollissima Tachybaptus ruficollis Tadorna tadorna Tringa totanus Vanellus spinosus Vanellus vanellus

Data completeness

In the following statistics, an empty value means the Member State(s) reported no missing or unknown data, 0, however, is a rounded value, which means the Member State(s) reported a few missing values.

Pressures and threats

Table B.2Frequency (%) of total number of pressures and threats reported for birds,
and reported percentage ranked 'high impact' (see Figure 2.19 in the main
report)

Level 1 category: Habitats	Pressure	s and threats
Level i calegory. habitats	Overall	High impact
A – Agriculture	15.7	21.5
B – Forestry	5.8	8.1
C - Mining, quarrying & energy production	6.0	3.8
D - Transportation & service infrastructure	6.8	3.6
E - Urbanisation, residential & commercial development	3.3	2.6
F - Use of living resources (other than agriculture and forestry)	11.7	11.1
G - Disturbances due to human activities	11.0	7.4
H - Pollution	7.5	5.0
I - Invasive and introduced species	2.4	2.9
J - Modification of natural conditions	13.3	19.9
K - Natural processes (excluding catastrophes)	6.7	7.6
L - Geological events, natural catastrophes	1.0	0.6
M - Climate change	5.1	5.5
U - Unknown threat or pressure	1.2	
X - No pressures or threats	1.7	
XE - Threats and pressures from outside the EU territory	0.5	0.4
XO - Threats and pressures from outside the Member State	0.1	< 0.1

Notes: The total number of assessments for high-ranked and overall threats and pressures is 3 756 and 13 233, respectively. Greece did not provide an Article 12 report.

Table B.3Proportion (as a percentage) of obligatory fields not completed for bird reports, with values greater than 50% highlighted
in orange

	Sub-national	Р	opulation (bre	eding)	Population (wintering)			Range (breeding)		
Member State	unit	Size	Short-term trend	Long-term trend	Size	Short-term trend	Long-term trend	Area	Short-term trend	Long-term trend
Austria			6	70			11		1	3
Belgium		1	6	14	2	59	55	1	3	14
Bulgaria			9	11		13	15		7	8
Cyprus			16	46			3		21	39
Czech Republic			15	13	40	40	40			
Germany				0	5	22	17			
Denmark			2	2		3	3		3	5
Estonia			1	1					1	1
Spain	Spain (without Canary Islands)		15	62	2	33	38		59	68
Spain	Canary Islands		92	95	NA	NA	NA		89	94
Finland			10	5				0	98	1
France			16	24	2	15	18		47	2
Hungary			25	54			23	0	20	45
Ireland		1	11	58		23	61		2	3
Italy		1	40	42					3	7
Lithuania			2	4		13	63	1	1	8
Luxembourg		1	24	31		4	25	3	4	2
Latvia		2	41	9		8	21	2	57	7
Malta			5	32		100	33	5	21	47
Netherlands		1	3	4	4	7	9	1	1	1
Poland			14	64	4	57	46	95	100	100
Portugal	Portugal (without Azores and Madeira)	5	50	84	7	19	25	1	19	21
Portugal	Azores	21	71	82	NA	NA	NA	6	85	82

	Sub-national unit	Population (breeding)			Population (wintering)			Range (breeding)		
Member State		Size	Short-term trend	Long-term trend	Size	Short-term trend	Long-term trend	Area	Short-term trend	Long-term trend
Portugal	Madeira		52	60	NA	NA	NA		52	90
Romania			68	79		21	86	2	86	87
Sweden			3	5		8	12		4	97
Slovenia			33	42		17	13		29	15
Slovakia		3	6	5		6	13	3	5	5
United Kingdom	Gibraltar									
United Kingdom	UK (without Gibraltar)	0	7	11		7	7	1	4	3

Notes: An empty value means the Member State reported no missing or unknown data; 0 is a rounded value, which means the Member State reported a few missing or unknown values. NA means this section is not applicable for the Member State.

Member State	Sub-national unit	Maps	Pressures and threats	Natura 2000 coverage	Conservation measures
Austria					1
Belgium		1	41	15	26
Bulgaria			12		
Cyprus					
Czech Republic					
Germany				1	11
Denmark			3	13	3
Estonia					
Spain	Spain (without Canary Islands)			13	
Spain	Canary Islands			30	
Finland		2	3	24	3
France				9	9
Hungary		0			
Ireland					
Italy		0		21	
Lithuania		1	13		81
Luxembo urg		3			
Latvia		2	42	21	
Malta		5			
Netherla nds		1		1	
Poland		95	3	26	
Portugal	Portugal (without Azores and Madeira)	2	4	6	
Portugal	Azores	6		22	
Portugal	Madeira			57	14
Romania		2	2		3
Sweden			5	1	4
Slovenia			4		13
Slovakia		3	1	1	
United Kingdom	Gibraltar		3		3
United Kingdom	UK (without Gibraltar)	2	2		1

Notes: An empty value means the Member State reported no missing or unknown data; 0 is a rounded value, which means the Member State reported a few missing or unknown values. Greece did not provide an Article 12 report.

Methods used and data quality

The most frequently used method for estimating parameters for winter population and range surface areas is the 'complete survey or statistically robust estimate' (see Figure B.1). More than 50 % of estimates of wintering population sizes, winter short-term trends and breeding range areas are based on complete surveys or statistically robust estimates. The estimates of breeding population sizes and breeding population and range trends are most often based on partial data. The methods used to estimate the parameters of bird statuses are closely linked to reported data quality. The data on winter population sizes, winter short-term trends and breeding ranges are of good quality in more than 50% of cases (see Figure B.2); for other parameters the data quality is mainly moderate.

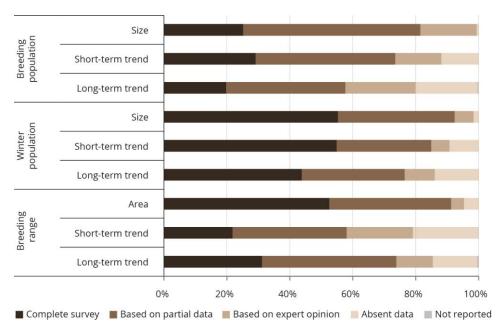


Figure B.1 Methods used to estimate parameters of bird status

Notes: The total number of reports is 5 346 and 1 022, respectively for breeding and wintering birds. Greece did not provide an Article 12 report.

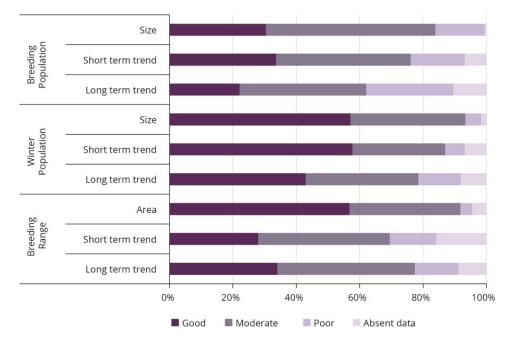


Figure B.2 Data quality of parameters of bird status

Notes: The total number of reports is 5 346 and 1 022, respectively for breeding and wintering birds. Greece did not provide an Article 12 report.

Source: EEA, 2015a, Article 12 reports and assessments.

Information on wintering populations

Data were requested for wintering water birds but some Member States also reported information on population size and trends for other species. This means that the data set for wintering populations is a mix of waterbirds and others, which complicates data interpretation.

Threats and pressures

Information on pressures and threats is only available for SPA trigger species at national level. However, for the SPA trigger species not listed in Annex I (about half of the trigger species), information on pressures and threats is not homogeneous: this limits its use in order to describe general pressures and threats to which bird species are exposed across the EU.

Reporting under Article 12 does not distinguish pressures from threats (but Article 17 reports under the Habitats Directive pressures and threats are reported separately, see Chapter 3). This means it is not possible to give an overview of pressures acting at present, separately from potential future threats.

Pressures and threats are reported using a hierarchical classification of pressures. Although the reporting guidelines recommended reporting at Level 2 of the hierarchical classification, almost half the pressures and threats were reported at the Levels 3 or 4. This causes problems when interpreting the ranking of importance of pressures and threats. When several Level 3 pressures are reported rather than one Level 2 pressure, the impact of a pressure can be potentially spread across several Level 3 pressures, so several Level 3 moderate impact pressures could give one high impact Level 2 pressure.

Spatial data

Greece did not provide any spatial data and the Czech Republic and Poland provided incomplete data sets. Although distribution maps are required for production of the Red List status, the contractor used alternative sources of data; this was necessary as Red List assessments were for both the EU and for pan-Europe.

There were some minor inconsistencies between the spatial and tabular data, particularly for suffixes for sub-species/units. For example, the tabular data has a report for A667-B *Ciconia ciconia ciconia* central & eastern Europe/sub-Saharan Africa, whereas the corresponding spatial data was reported as A667-A *Ciconia ciconia ciconia* western Europe & north-west Africa/sub-Saharan Africa. These errors were corrected when the EU spatial data set was prepared.

Member State	Increasing	Unknown/Not reported	Stable	Fluctuating	Decreasing
Malta (24)	70.8	4.2	12.5	0	12.5
Czech Republic (40)	60.0	5.0	22.5	2.5	10.0
United Kingdom (277)	45.1	5.1	12.3	2.2	35.4
Netherlands (188)	38.8	3.2	16.5	4.8	36.7
Ireland (136)	37.5	11.8	24.3	0	26.5
Poland (238)	32.8	17.6	16.4	6.3	26.9
France (294)	30.6	11.9	25.2	7.1	25.2
Germany (250)	30.0	0.8	24.4	11.2	33.6
Finland (250)	29.2	9.6	26.8	7.2	27.2
Spain (340)	28.8	14.7	25.6	5.3	25.6
Italy (268)	28.0	33.2	15.3	1.9	21.6
Cyprus (95)	26.3	15.8	48.4	0	9.5
Lithuania (214)	23.4	3.7	53.7	2.3	16.8
Denmark (193)	22.3	2.1	40.4	2.1	33.2
Sweden (263)	21.7	3.0	49.0	0.8	25.5
Portugal (272)	21.3	44.5	18.8	3.3	12.1
Luxembourg (131)	20.6	23.7	15.3	9.9	30.5
Belgium (185)	19.5	7.0	47.0	0	26.5
Latvia (218)	19.3	40.4	22.0	6.4	11.9
Hungary (218)	18.8	24.8	19.3	15.1	22.0
Bulgaria (256)	18.8	9.8	43.0	10.2	18.4
Estonia (219)	17.4	2.3	40.6	2.7	37.0
Slovenia (210)	16.7	32.9	20.5	6.2	23.8
Austria (219)	15.5	5.5	53.9	10.0	15.1
Slovakia (222)	12.2	6.8	41.4	5.0	34.7
Romania (253)	8.3	67.6	5.1	14.2	4.7

Table B.4	Short-term	trends	of	breeding	population,	by	Member	State	(see
	Figure 2.1)								

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 5 473. The data for the Czech Republic only covers Annex I species. Greece did not provide an Article 12 report.

Member State (no of assessments)	Increasing	Unknown/Not reported	Stable	Fluctuating	Decreasing
Malta (24)	66.7	4.2	4.2	8.3	16.7
Czech Republic (40)	65.0	2.5	17.5	0	15.0
United Kingdom (277)	48.4	9.0	8.7	1.8	32.1
Latvia (218)	47.2	9.2	17.4	0.9	25.2
Netherlands (188)	46.8	3.7	14.4	1.1	34.0
Belgium (185)	40.5	13.5	23.2	0	22.7
Denmark (193)	38.9	2.1	19.2	2.1	37.8
Finland (250)	38.0	5.2	16.4	6.8	33.6
Spain (340)	37.9	11.2	20.6	3.2	27.1
Germany (250)	36.8	0.8	28.0	8.4	26.0
Cyprus (95)	34.7	44.2	6.3	0	14.7
Italy (268)	34.7	23.9	11.9	3.0	26.5
France (294)	33.0	18.0	13.9	4.8	30.3
Sweden (263)	31.2	4.6	28.5	1.1	34.6
Estonia (219)	25.6	2.3	32.4	2.7	37.0
Lithuania (214)	24.3	6.1	48.6	1.9	19.2
Luxembourg (131)	22.1	30.5	5.3	6.1	35.9
Bulgaria (256)	21.1	11.7	44.5	7.0	15.6
Ireland (136)	19.1	56.6	6.6	0	17.6
Slovenia (210)	18.6	41.0	17.1	4.3	19.0
Austria (219)	18.3	69.4	2.3	3.2	6.8
Hungary (218)	17.9	52.3	1.4	9.2	19.3
Portugal (272)	17.3	62.5	8.8	1.1	10.3
Slovakia (222)	15.3	5.4	36.9	5.0	37.4
Poland (238)	15.1	61.8	3.4	3.8	16.0
Romania (253)	9.5	79.4	5.5	0	5.5

Table B.5Long-term trends of breeding population, by Member State (see
Figure 2.2)

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 5 473. The data for the Czech Republic only covers Annex I species. Greece did not provide an Article 12 report.

Member State (no of assessments	Increasing	Unknown/Not reported	Stable	Fluctuating	Decreasing
Finland (11)	63.6	0	9.1	18.2	9.1
Italy (33)	60.6	0	12.1	12.1	15.2
France (61)	44.3	13.1	11.5	23.0	8.2
Spain (92)	41.3	7.6	18.5	7.6	25.0
Sweden (26)	38.5	7.7	34.6	0	19.2
Slovakia (16)	37.5	6.3	31.3	0	25.0
Austria (19)	36.8	0	31.6	15.8	15.8
Netherlands (57)	36.8	5.3	12.3	24.6	21.1
Cyprus (31)	35.5	0	38.7	0	25.8
Denmark (37)	32.4	2.7	32.4	24.3	8.1
Portugal (59)	32.2	16.9	25.4	23.7	1.7
Germany (78)	28.2	21.8	2.6	30.8	16.7
Bulgaria (71)	25.4	12.7	9.9	32.4	19.7
Estonia (20)	25.0	0	60.0	0	15.0
Ireland (57)	24.6	22.8	12.3	15.8	24.6
Slovenia (47)	23.4	17.0	19.1	25.5	14.9
United Kingdom (97)	21.6	4.1	25.8	6.2	42.3
Luxembourg (24)	20.8	4.2	12.5	58.3	4.2
Romania (42)	16.7	21.4	9.5	33.3	19.0
Hungary (13)	15.4	0	0	69.2	15.4
Latvia (24)	8.3	8.3	58.3	25.0	0
Belgium (56)	7.1	58.9	0	0	33.9
Poland (28)	3.6	57.1	7.1	32.1	0
Malta (3)	0	100	0	0	0
Lithuania (16)	0	12.5	56.3	12.5	18.8
Czech Republic (5)	0	20.0	20.0	40.0	20.0

Table B.6Short-term trends of wintering population, by Member State (see
Figure 2.3)

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 1 023. The Czech Republic only reported Annex I species. Greece did not provide an Article 12 report.

Member State (no of assessments)	Increasing	Unknown/Not reported	Stable	Fluctuating	Decreasing
Sweden (26)	73.1	11.5	0	0	15.4
Malta (3)	66.7	33.3	0	0	0
Italy (33)	66.7	0	3.0	18.2	12.1
Cyprus (31)	64.5	3.2	12.9	0	19.4
Finland (11)	63.6	0	9.1	18.2	9.1
France (61)	62.3	11.5	0	19.7	6.6
Estonia (20)	60.0	0	35.0	0	5.0
Spain (92)	59.8	12.0	2.2	6.5	19.6
Slovakia (16)	50.0	12.5	18.8	0	18.8
Netherlands (57)	49.1	5.3	26.3	3.5	15.8
United Kingdom (97)	46.4	4.1	23.7	6.2	19.6
Luxembourg (24)	45.8	25.0	8.3	16.7	4.2
Austria (19)	36.8	10.5	26.3	5.3	21.1
Germany (78)	33.3	16.7	14.1	16.7	19.2
Denmark (37)	32.4	2.7	21.6	29.7	13.5
Hungary (13)	30.8	23.1	7.7	23.1	15.4
Latvia (24)	29.2	20.8	20.8	8.3	20.8
Portugal (59)	23.7	20.3	37.3	8.5	10.2
Slovenia (47)	23.4	12.8	12.8	19.1	31.9
Belgium (56)	23.2	55.4	3.6	0	17.9
Poland (28)	21.4	46.4	3.6	25.0	3.6
Czech Republic (5)	20.0	0	20.0	40.0	20.0
Ireland (57)	19.3	61.4	3.5	0	15.8
Bulgaria (71)	15.5	15.5	2.8	47.9	18.3
Romania (42)	4.8	85.7	0	2.4	7.1
Lithuania (16)	0	62.5	12.5	6.3	18.8

Table B.7Long-term trends of wintering population, by Member State (see
Figure 2.4)

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 1 023. The Czech Republic only reported Annex I species. Greece did not provide an Article 12 report.

Table B.8EU population status of birds (in %) in Annexes I and II of the Birds
Directive, birds not in Annexes I or II of the Birds Directive, and all birds
(see Figure 2.8)

Population status	Annex I	Annex II	Non-Annex I/II	All taxa
Near Threatened, Declining or Depleted	14.1	16.7	16.5	15.2
Secure	47.9	55.1	54.3	51.9
Threatened	22.9	21.8	9.6	17.2
Unknown	15.1	6.4	19.7	15.7

Notes: The total number of assessments for birds under the category Annex I, Annex II, Non-Annex I and II, all taxa, is 192, 78, 188 and 447, respectively.

Source: EEA, 2015a, Article 12 reports and assessments.

Table B.9Short-term EU breeding population trends (in %) of birds in Annexes I and
II of the Birds Directive, birds not in Annexes I or II of the Birds Directive,
and all birds (see Figure 2.9)

Short-term trend	Annex I	Annex II	Non-Annex I/II	All taxa
Decreasing	21.8	45.8	32.0	30.2
Fluctuating	4.3	0.0	1.5	2.4
Stable	18.6	19.4	23.5	20.9
Increasing	33.5	26.4	23.5	28.0
Uncertain/Unknown	21.8	8.3	19.5	18.5

Notes: *Perdix perdix italica* is excluded from the short-term breeding trends because it became extinct in 2001. The total number of assessments for birds under the category Annex I, Annex II, Non-Annex I and II, all taxa, is 188, 72, 200 and 454, respectively.

Source: EEA, 2015a, Article 12 reports and assessments.

Table B.10Long-term EU breeding population trends (in %) of birds in Annexes I
and II of the Birds Directive, birds not in Annex I or II of the Birds
Directive, and all birds (see Figure 2.10)

Long-term trend	Annex I	Annex II	Non-Annex I/II	All taxa
Decreasing	22.8	40.3	26.5	26.8
Fluctuating	1.6	0.0	1.0	1.1
Stable	5.3	9.7	16.0	10.5
Increasing	39.7	33.3	22.0	31.2
Uncertain/Unknown	30.7	16.7	34.5	30.3

Notes: The total number of assessments for birds under the category Annex I, Annex II, Non-Annex I and II, all taxa, is 189, 72, 200 and 455, respectively.

Table B.11Short-term EU winter population trends (in %) of birds in Annexes I and II
of the Birds Directive, birds not in Annexes I or II of the Birds Directive,
and all birds (see Figure 2.11)

Short-term trend	Annex I	Annex II	Non-Annex I/II	All taxa
Decreasing	25.0	30.3	21.4	27.2
Fluctuating	16.7	18.2	21.4	18.5
Stable	2.8	6.1	0	3.7
Increasing	47.2	42.4	50.0	45.7
Uncertain	5.6	0	0	2.5
Unknown	2.8	3.0	7.1	2.5

Notes: The total number of assessments for birds under the category Annex I, Annex II, Non-Annex I and II, all taxa, is 36, 33, 14 and 81, respectively.

Source: EEA, 2015a, Article 12 reports and assessments.

Table B.12Long-term EU winter population trends (in %) of birds in Annexes I and II
of the Birds Directive, birds not in Annex I or II of the Birds Directive, and
all birds (see Figure 2.12)

Long-term trend	Annex I	Annex II	Non-Annex I/II	All taxa
Decreasing	11.1	18.2	7.1	13.6
Fluctuating	5.6	6.1	14.3	7.4
Stable	2.8	6.1	7.1	4.9
Increasing	63.9	60.6	64.3	63.0
Uncertain	11.1	0	0	4.9
Unknown	5.6	9.1	7.1	6.2

Notes: The total number of assessments for birds under the category Annex I, Annex II, Non-Annex I and II, all taxa, is 36, 33, 14 and 81, respectively.

Order	Secure	Unknown	Near threatened, declining, depleted	Threatened
Cuckoos (2)	100	0	0	0
Loons or Divers (3)	100	0	0	0
Storks and Flamingo (3)	100	0	0	0
Herons, Pelicans, Ibises and Spoonbills (13)	92.3	7.7	0	0
Grebes (5)	80.0	0	0	20.0
Gannets and Cormorants (4)	75.0	0	25.0	0
Hawks and Eagles (28)	64.3	3.6	7.1	25.0
Pigeons and Doves (8)	62.5	12.5	25.0	0
Owls (13)	61.5	30.8	0	7.7
Woodpeckers (11)	54.5	27.3	18.2	0
Passerines (182)	50.0	22.0	18.7	9.3
Cranes, Rails, Gallinules and Coots (10)	50.0	20.0	20.0	10.0
Kingfishers, Rollers, Bee-eaters and Hoopoe (4)	50.0	25.0	0	25.0
Waders, Gulls and Auks (74)	50.0	4.1	20.3	25.7
Falcons (10)	50.0	10.0	0	40.0
Ducks, Geese and Swans (36)	47.2	5.6	11.1	36.1
Swifts and Nightjars (8)	37.5	37.5	12.5	12.5
Bustards (3)	33.3	0.0	33.3	33.3
Pheasants, Partridges and Grouse (13)	30.8	15.4	30.8	23.1
Petrels, Storm-petrels and Shearwaters (15)	20.0	33.3	0	46.7
Sandgrouse (2)	0	0	50.0	50.0

Table B.13 Population status of EU birds, by taxonomic order (see Figure 2.16)

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 447.

Order	Decreasing	Fluctuating	Stable	Increasing	Uncertain/ Unknown
Storks and Flamingo (3)	0	0	0	100	0
Gannets and Cormorants (5)	20.0	0	0	80.0	0
Herons, Pelicans, Ibises and Spoonbills (13)	38.5	0	0	53.8	7.7
Cuckoos (2)	0	0	50.0	50.0	0
Sandgrouse (2)	50.0	0	0	50.0	0
Falcons (11)	18.2	0	18.2	45.5	18.2
Hawks and Eagles (30)	23.3	0	20.0	43.3	13.3
Woodpeckers (12)	8.3	0	25.0	33.3	33.3
Pigeons and Doves (9)	11.1	0	22.2	33.3	33.3
Bustards (3)	33.3	0	33.3	33.3	0
Waders, Gulls and Auks (71)	35.2	4.2	15.5	29.6	15.5
Ducks, Geese and Swans (31)	41.9	0	19.4	29.0	9.7
Passerines (188)	30.9	1.1	26.6	22.3	19.1
Pheasants, Partridges and Grouse (18)	50.0	0	16.7	22.2	11.1
Petrels, Storm-petrels and Shearwaters (14)	35.7	0	14.3	21.4	28.6
Cranes, Rails, Gallinules and Coots (10)	10.0	10.0	30.0	20.0	30.0
Grebes (5)	40.0	0	0	20.0	40.0
Owls (13)	15.4	38.5	0	15.4	30.8
Swifts and Nightjars (8)	25.0	0	12.5	12.5	50.0
Loons or Divers (2)	0	0	100	0	0
Kingfishers, Rollers, Bee-eaters and Hoopoe (4)	25.0	0	50.0	0	25.0

Table B.14Short-term EU breeding population trends (in %) of birds, by taxonomic
order (see Figure 2.17)

Notes: *Perdix perdix italica* is excluded from the short-term breeding trends because it became extinct in 2001. The number of assessments is indicated in parentheses. The total number of assessments is 454.

Order	Decreasing	Fluctuating	Stable	Increasing	Uncertain/ Unknown
Loons or Divers (2)	0	0	0	100	0
Storks and Flamingo (3)	0	0	0	100	0
Pigeons and Doves (9)	11.1	0	11.1	66.7	11.1
Bustards (3)	33.3	0	0	66.7	0
Hawks and Eagles (30)	16.7	0	3.3	60.0	20.0
Gannets and Cormorants (5)	20.0	0	0	60.0	20.0
Herons, Pelicans, Ibises and Spoonbills (13)	7.7	0	15.4	53.8	23.1
Cuckoos (2)	0	0	0	50.0	50.0
Falcons (11)	9.1	0	9.1	45.5	36.4
Woodpeckers (12)	8.3	0	8.3	41.7	41.7
Waders, Gulls and Auks (71)	45.1	0	8.5	39.4	7.0
Ducks, Geese and Swans (31)	41.9	3.2	6.5	38.7	9.7
Cranes, Rails, Gallinules and Coots (10)	10.0	10.0	10.0	30.0	40.0
Petrels, Storm-petrels and Shearwaters (14)	0	0	14.3	28.6	57.1
Swifts and Nightjars (8)	0	0	12.5	25.0	62.5
Owls (13)	30.8	7.7	0	23.1	38.5
Grebes (5)	20.0	0	0	20.0	60.0
Passerines (188)	25.5	1.1	15.4	18.6	39.4
Pheasants, Partridges and Grouse (19)	52.6	0	0	10.5	36.8
Kingfishers, Rollers, Bee-eaters and Hoopoe (4)	0	0	25.0	0	75.0
Sandgrouse (2)	100	0	0	0	0

Table B.15Long-term EU breeding population trends (in %) of birds, by taxonomic
order (see Figure 2.18)

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 455.

Annex C (Chapter 3)

Methodology

Table C.1Evaluation matrix for assessing the conservation status of non-bird
species under Article 17 reporting

Parameter	Conserva	ation Status		
	Favourable	Unfavourable - Inadequate	Unfavourable - Bad	Unknown
Range (within the biogeographical region concerned)	Stable (loss and expansion in balance) or increasing <u>AND</u> not smaller than the 'favourable reference range'	Any other combination	Large decline: Equivalent to a loss of more than 1% per year within period specified by Member State <u>OR</u> more than 10% below favourable reference range	No or insufficient reliable information available
Population	Population(s) not lower than 'favourable reference population' AND reproduction, mortality and age structure not deviating from normal (if data available)	Any other combination	Large decline: Equivalent to a loss of more than 1% per year (indicative value MS may deviate from if duly justified) within period specified by MS <u>AND</u> below 'favourable reference population' <u>OR</u> More than 25% below favourable reference population <u>OR</u> Reproduction, mortality and age structure strongly deviating from normal (if data available)	No or insufficient reliable information available
Habitat for the species	Area of habitat is sufficiently large (and stable or increasing) <u>AND</u> habitat quality is suitable for the long term survival of the species	Any other combination	Area of habitat is clearly not sufficiently large to ensure the long term survival of the species <u>OR</u> Habitat quality is bad, clearly not allowing long term survival of the species	No or insufficient reliable information available
Future prospects (as regards to population, range and habitat availability)	Main pressures and threats to the species not significant; species will remain viable on the long-term	Any other combination	Severe influence of pressures and threats to the species; very bad prospects for its future, long-term viability at risk.	No or insufficient reliable information available
Overall assessment of CS	All 'green' OR three 'green' and one 'unknown'	One or more 'amber' but no 'red'	One or more 'red'	Two or more 'unknown' combined with green or all "unknown"

Source: Adapted from EC, 2005.

Table C.2Evaluation matrix for assessing the conservation status of habitats under
Article 17 reporting

Parameter	Conservation Sta	itus		
	Favourable	Unfavourable - Inadequate	Unfavourable - Bad	Unknown
Range (within the biogeographical region concerned)	Stable (loss and expansion in balance) or increasing <u>AND</u> not smaller than the 'favourable reference range'	Any other combination	Large decrease: Equivalent to a loss of more than 1% per year within period specified by MS <u>OR</u> More than 10% below 'favourable reference range'	No or insufficient reliable information available
Area covered by habitat type within range Note: There may be situations where the habitat area has decreased as a result of management measures to restore another Annex I habitat or habitat of an Annex II species. The habitat could still be considered to be at 'Favourable Conservation Status' but in such cases please give details in the Complementary Information section ("Other relevant information") of Annex D	Stable (loss and expansion in balance) or increasing <u>AND</u> not smaller than the 'favourable reference area' <u>AND</u> without significant changes in distribution pattern within range (if data available)	Any other combination	Large decrease in surface area: Equivalent to a loss of more than 1% per year (indicative value MS may deviate from if duly justified) within period specified by MS <u>OR</u> With major losses in distribution pattern within range <u>OR</u> More than 10% below 'favourable reference area'	No or insufficient reliable information available
Specific structures and functions (including typical species)	Structures and functions (including typical species) in good condition and no significant deteriorations / pressures.	Any other combination	More than 25% of the area is unfavourable as regards its specific structures and functions (including typical species) (¹)	No or insufficient reliable information available
Future prospects (as regards range, area covered and specific structures and functions)	The habitats prospects for its future are excellent / good, no significant impact from threats expected; long-term viability assured.	Any other combination	The habitats prospects are bad, severe impact from threats expected; long-term viability not assured.	No or insufficient reliable information available
Overall assessment of CS	All 'green' OR three 'green' and one 'unknown'	One or more 'amber' but no 'red'	One or more 'red'	Two or more 'unknown' combined with green or all "unknown'

Source: Adapted from EC, 2005.

^{(&}lt;sup>1</sup>) For example, by discontinuation of former management, or is under pressure from significant adverse influences, e.g. critical loads of pollution exceeded.

Table C.3	Types of status of species and habitats
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Code	Description					
1	The habitat type is present in the region, or the species occurs regularly in the region.					
ARR	Newly arriving species. These are the species which do not represent a component of fauna of the biogeographical region, but which started to be observed recently. These should be reported, in line with Article 17 guidelines.					
EX	Species which became extinct after the Habitats Directive came into force. This category includes species for which the last record of the species (even if it was a single individual) which had previously stable occurrence in the region was after the date when the directive came into force. Evaluation of the conservation status is expected					
EX_GLOBAL	Species which became globally extinct after the Habitats Directive came into force. This category includes species for which the last record of the species (even if it was a single individual) which had previously stable occurrence in the region was after the date when the directive came into force. Evaluation of the conservation status is expected.					
IRM	The report in marine region provided for a species, which should only be reported in 'terrestrial' biogeographical regions.					
LR	The link of the species and the corresponding name in the directive is not clear					
MAR	Marginal occurrence. This category is used where a habitat type or species occurs mostly in one region but with the distribution extending across the boundaries of the region to a neighbouring region in the same country. In this situation, it is possible to provide a single report compiling information for both regions. However, in cases when one report contains information on a habitat/population from more regions, the marginal occurrences should be marked in the checklist.					
N/R	The species or habitat type which do not occur in the area of Cyprus where the Community acquis applies at present.					
N/SR TAX	The taxonomy of the species is not clear or was ambiguous at the time the directive's annexes were drafted, and at present it is not possible to attribute any species population to the name listed in the directive. No Article 17 report is expected.					
OCC	Occasionally occurring species (in some documents, the term 'vagrant' also has been used; these two terms are considered here as synonyms). Occasional species are species which do not have stable and regular occurrence in the biogeographical region or the number of specimens is insignificant. The occasional species should be reported, if possible following the Article 17 guidelines.					
OP	Optional report. The additional report provided for a species should a Member State provided specific report at different taxonomical level to that recommended.					
PEX	Species which became extinct prior to the Habitats Directive coming into force. This category includes species for which the last record of the species (even if it was a single individual) which had a previously stable occurrence in the region was before the date when the directive came into force. These species are included only for information.					
SR	The status of the species is uncertain. For example there are only occasional records of the species and it is not possible to judge whether it occurs regularly in significant numbers. Basically, this criterion should not be used for species which were known from a biogeographical region and which have recently disappeared. Assessment of the conservation status is not expected.					
	The presence of the habitat type is uncertain; it is often linked to problems with interpretation of the habitat type. Assessment of the conservation status is not expected.					

Source: Adapted from 'Note to the Article 17 Checklist', Article 17 Reference Portal; see <u>http://biodiversity.eionet.europa.eu/activities/Natura_2000/Folder_Reference_Portal/Read_me.pdf</u>.

Table C.4 Methods used to produce EU biogeographical or marine regional assessments (2)

Code	Method	Preference
0	Conclusions for a parameter are the same for all Member States within the region	1
00	The habitat or species only occurs in one Member State within the region so, unless there are good reasons, the Member State assessment is also the EU regional assessment	1
1	Parameter assessed using the evaluation matrix after summing the Member State data. This should only be used for range, population (species) and area (habitats).	1
2XA	Parameter weighted by area of the coverage from XML data (habitats only)	2
2XP	Parameter weighted by population from XML data (species only)	2
2GD	Parameter weighted by area of distribution from GIS data	3
2XR	Parameter weighted by range from XML data	4
2GR	Parameter weighted by surface of gridded range from GIS data	5
3XA	Overall conclusion weighted by area from XML data (habitats only)	6
3XP	Overall conclusion weighted by population from XML data (species only)	6
3GD	Overall conclusion weighted by area of distribution from GIS data	7
3XR	Overall conclusion weighted by range from XML data	8
3GR	Overall conclusion weighted by surface of gridded range from GIS data	9
Other co	des	
MTX	Overall conclusion assessed from assessments using methods 1 or 2 of the 4 parameters, using the last row of the evaluation matrix (only used for overall Conservation Status)	-
ОТН	Other method was used; explanations are provided in the audit trail	-

Notes: The codes are those used on the Article 17 web tool (G is spatial data, X is tabular data, A is area, P is population, R is range and, D is distribution); where two or more methods are given the same preference, often only one will be possible in a given situation.

^{(&}lt;sup>2</sup>) see <u>http://forum.eionet.europa.eu/x_habitat-art17report/library/papers_technical/reporting_ver1pdf</u>.

Figure C.1 Decision making chain to identify qualifiers for EU regional assessments

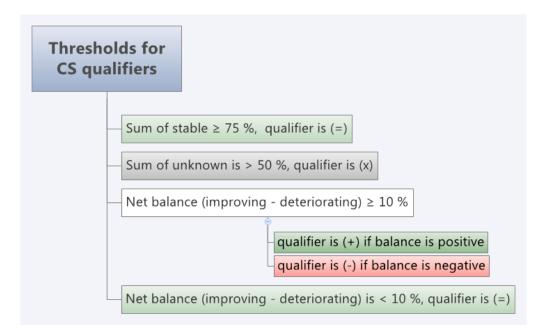
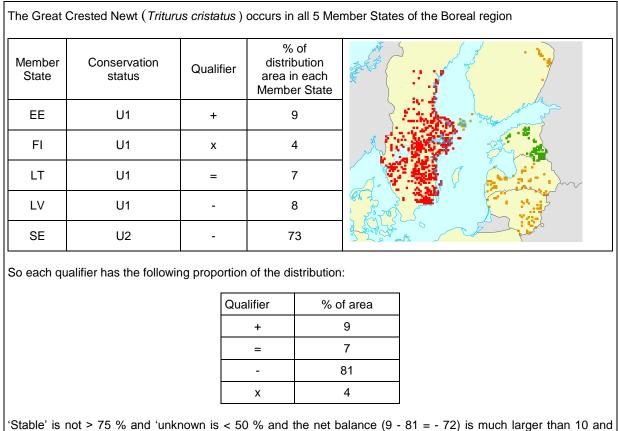


Figure C.2 Assessing qualifiers at EU regional level: An example



3.1 Conservation status at the Member State level

Member State (no of assessments)	Favourable (FV)	Unknown (XX)	Unfavourable- inadequate (U1)	Unfavourable-bad (U2)
Cyprus (42)	97.6	0	0	2.4
Romania (168)	62.5	2.4	28.0	7.1
Estonia (60)	51.7	0	45.0	3.3
Malta (30)	43.3	0	50.0	6.7
Slovenia (89)	42.7	1.1	28.1	28.1
Slovakia (101)	38.6	5.9	43.6	11.9
Finland (92)	33.7	1.1	39.1	26.1
Portugal (156)	29.5	3.9	58.3	8.3
Germany (192)	28.1	2.1	39.1	30.7
Sweden (187)	25.7	2.1	24.6	47.6
Luxembourg (28)	25.0	0	28.6	46.4
France (297)	22.6	3.7	38.0	35.7
Italy (261)	22.2	10.4	40.2	27.2
Poland (116)	19.8	9.5	50.0	20.7
Hungary (46)	19.6	0	56.5	23.9
Lithuania (54)	18.5	5.6	51.8	24.1
Czech Republic (93)	16.1	1.1	55.9	26.9
Austria (124)	13.7	7.3	41.1	37.9
Spain (244)	12.3	25.4	48.0	14.3
Bulgaria (184)	10.9	1.1	88.0	0
Latvia (57)	10.5	3.5	35.1	50.9
Ireland (58)	8.6	0	50.0	41.4
Belgium (93)	8.6	1.1	17.2	73.1
United Kingdom (87)	6.9	3.4	18.4	71.3
Denmark (111)	5.4	4.5	21.6	68.5
Netherlands (52)	3.8	0	50.0	46.2

Table C.5Proportion of habitat assessments in each conservation class (FV, XX, U1, U2),
per Member State (2007-2012) (%) (see Figure 3.1)

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 3 022. Greece did not provide an Article 12 report.

Table C.6Conservation status and trends of habitats assessed as unfavourable at
Member State level (%) (see Figure 3.2)

Member State (no of assessments)	Favourable	Unfavourable- improving	Unfavourable- unknown-trend	Unknown	Unfavourable- stable	Unfavourable- declining
Cyprus (42)	97.6	0	0	0	2.4	0
Romania (168)	62.5	0	12.5	2.4	16.7	6.0
Estonia (60)	51.7	13.3	6.7	0	18.3	10.0
Malta (30)	43.3	0	3.3	0	50.0	3.3
Slovenia (89)	42.7	3.4	0	1.1	23.6	29.2
Slovakia (101)	38.6	1.0	0	5.9	40.6	13.9
Finland (92)	33.7	8.7	0	1.1	18.5	38.0
Portugal (156)	29.5	3.9	9.0	3.8	34.6	19.2
Germany (192)	28.1	1.0	7.8	2.1	31.3	29.7
Sweden (187)	25.7	3.7	9.1	2.1	16.6	42.8
Luxembourg (28)	25.0	14.3	21.4	0	25.0	14.3
France (297)	22.6	0.7	5.4	3.7	38.0	29.6
Italy (261)	22.2	0.4	10.7	10.4	11.9	44.4
Poland (116)	19.8	8.6	4.3	9.5	29.3	28.4
Hungary (46)	19.6	2.2	0	0	45.7	32.6
Lithuania (54)	18.5	0	0	5.6	37.0	38.9
Czech Republic (93)	16.1	18.3	0	1.1	26.9	37.6
Austria (124)	13.7	2.4	37.1	7.3	29.8	9.7
Spain (244)	12.3	5.3	25.0	25.4	16.0	16.0
Bulgaria (184)	10.9	0	0	1.1	87.5	0.5
Latvia (57)	10.5	1.8	19.3	3.5	17.5	47.4
Ireland (58)	8.6	13.8	5.2	0	46.6	25.9
Belgium (93)	8.6	26.9	18.3	1.1	36.6	8.6
United Kingdom (87)	6.9	27.6	0	3.4	39.1	23.0
Denmark (111)	5.4	9.9	27.9	4.5	50.5	1.8
Netherlands (52)	3.8	9.6	13.5	0	46.2	26.9

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 3 022. Greece did not provide an Article 12 report.

Table C.7Proportion (%) of changes for habitats and species, at Member State and EU
biogeographical level

Code	Member State level			EU biogeographical level		
Nature of change	No-change	Genuine	Non-genuine	No-change	Genuine	Non-genuine
Habitats	62.2	2.4	35.4	49.5	1.6	48.9
Species	58.8	4.5	36.7	50.1	3.1	46.8

Notes: The total number of assessments at the Member State level for habitats and species is 2 670 and 5 752, respectively. The total number of assessments at the EU biogeographical level for habitats and species is 804 and 2 665, respectively.

Source: EEA 2015b, Article 17 reports and assessments.

Table C.8Proportion (%) of habitat assessments in each change class (genuine, no
change, non-genuine), per Member State (2007-2012) (see Figure 3.3)

Member State (no of assessments)	Genuine	No change	Non-genuine
Ireland (58)	12.1	70.7	17.2
United Kingdom (87)	11.5	83.9	4.6
Slovenia (89)	11.2	66.3	22.5
Latvia (57)	7.0	47.4	45.6
Germany (192)	6.8	70.3	22.9
Belgium (93)	4.3	65.6	30.1
Luxembourg (28)	3.6	21.4	75.0
Portugal (156)	2.6	81.4	16.0
Czech Republic (93)	2.2	45.2	52.7
Lithuania (54)	1.9	96.3	1.9
France (297)	1.7	64.3	34.0
Slovakia (101)	1.0	83.2	15.8
Poland (116)	0.9	62.1	37.1
Finland (92)	0	97.8	2.2
Sweden (187)	0	86.6	13.4
Netherlands (52)	0	76.9	23.1
Austria (124)	0	75.8	24.2
Estonia (60)	0	73.3	26.7
Denmark (111)	0	55.0	45.0
Hungary (46)	0	47.8	52.2
Malta (30)	0	40.0	60.0
Italy (261)	0	34.1	65.9
Spain (244)	0	27.9	72.1
Cyprus (42)	0	21.4	78.6

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 2 670. Greece did not provide an Article 12 report.

Table C.9	Proportion (%) of species assessments in each conservation status class (FV,
	XX, U1, U2), per Member State (2007-2012) (see Figure 3.4)

Member State (no of assessments)	Favourable (FV)	Unknown (XX)	Unfavourable- inadequate (U1)	Unfavourable-bad (U2)
Cyprus (55)	69.1	16.4	12.7	1.8
Estonia (99)	53.5	11.1	27.3	8.1
Bulgaria (437)	53.3	8.7	35.5	2.5
Ireland (61)	52.5	18.0	19.7	9.8
Finland (150)	46.0	7.3	35.3	11.3
Sweden (281)	45.6	0	13.5	40.9
United Kingdom (104)	42.3	15.4	24.0	18.3
Malta (52)	40.4	15.4	36.5	7.7
Italy (547)	39.7	9.7	34.0	16.6
Hungary (209)	35.9	1.4	54.1	8.6
Poland (272)	32.0	18.0	36.4	13.6
Denmark (122)	32.0	27.0	12.3	28.7
France (637)	29.8	14.3	31.6	24.3
Slovenia (328)	29.0	19.5	40.9	10.7
Latvia (113)	28.3	11.5	38.1	22.1
Lithuania (98)	26.5	8.2	55.1	10.2
Czech Republic (267)	25.8	4.9	37.8	31.5
Germany (366)	24.6	15.0	31.4	29.0
Netherlands (79)	22.8	3.8	22.8	50.6
Spain (638)	21.6	24.9	34.8	18.7
Slovakia (319)	19.7	19.4	40.8	20.1
Portugal (422)	19.7	40.5	30.6	9.2
Belgium (134)	19.4	11.9	25.4	43.3
Romania (570)	19.0	8.4	67.2	5.4
Luxembourg (60)	18.3	6.7	40.0	35.0
Austria (339)	15.9	2.4	47.2	34.5

Notes: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 6 759. Greece did not provide an Article 12 report.

Table C.10Conservation status and trends of species assessed as unfavourable at
Member State level (%) (see Figure 3.5)

Member State (no of assessments)	Favourable	Unfavourable- improving	Unfavourable- unknown- trend	Unknown	Unfavourable- stable	Unfavourable- declining
Cyprus (55)	69.1	5.5	1.8	16.4	7.3	0
Estonia (99)	53.5	6.1	5.1	11.1	16.2	8.1
Bulgaria (437)	53.3	1.1	4.3	8.7	4.8	27.7
Ireland (61)	52.5	4.9	1.6	18.0	13.1	9.8
Finland (150)	46.0	4.0	8.7	7.3	19.3	14.7
Sweden (281)	45.6	7.1	6.4	0	19.6	21.4
United Kingdom (104)	42.3	8.7	1.0	15.4	18.3	14.4
Malta (52)	40.4	3.8	7.7	15.4	30.8	1.9
Italy (547)	39.7	1.3	4.2	9.7	5.1	40.0
Hungary (209)	35.9	2.9	12.4	1.4	34.4	12.9
Poland (272)	32.0	12.1	15.8	18.0	8.5	13.6
Denmark (122)	32.0	9.8	27.9	27.0	2.5	0.8
France (637)	29.8	2.5	10.2	14.3	28.6	14.6
Slovenia (328)	29.0	2.1	17.1	19.5	8.2	24.1
Latvia (113)	28.3	2.7	23.9	11.5	16.8	16.8
Lithuania (98)	26.5	4.1	17.3	8.2	42.9	1.0
Czech Republic (267)	25.8	3.4	3.7	4.9	44.2	18.0
Germany (366)	24.6	9.6	9.0	15.0	20.5	21.3
Netherlands (79)	22.8	40.5	7.6	3.8	13.9	11.4
Spain (638)	21.6	10.0	13.8	24.9	9.4	20.2
Slovakia (319)	19.7	3.1	0.9	19.4	29.5	27.3
Portugal (422)	19.7	3.3	21.1	40.5	7.1	8.3
Belgium (134)	19.4	19.4	13.4	11.9	11.2	24.6
Romania (570)	19.0	0	41.9	8.4	14.6	16.1
Luxembourg (60)	18.3	6.7	31.7	6.7	18.3	18.3
Austria (339)	15.9	8.3	25.1	2.4	19.5	28.9

Notes: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 6 759. Greece did not provide an Article 12 report.

Member State (no of assessments)	Genuine	No change	Non-genuine
Czech Republic (267)	12.0	64.0	24.0
Germany (366)	9.3	68.3	22.4
Netherlands (79)	8.9	60.8	30.4
Latvia (113)	6.2	55.8	38.1
Finland (150)	6.0	79.3	14.7
France (637)	5.7	55.9	38.5
Italy (547)	5.5	43.0	51.6
Belgium (134)	5.2	54.5	40.3
Lithuania (98)	5.1	48.0	46.9
United Kingdom (104)	4.8	60.6	34.6
Slovenia (328)	4.6	66.5	29.0
Slovakia (319)	4.4	75.5	20.1
Estonia (99)	4.0	63.6	32.3
Malta (52)	3.8	61.5	34.6
Hungary (209)	3.8	66.5	29.7
Luxembourg (60)	3.3	58.3	38.3
Poland (272)	3.3	69.5	27.2
Austria (339)	2.9	73.5	23.6
Sweden (281)	2.8	75.8	21.4
Portugal (422)	2.6	54.7	42.7
Denmark (122)	2.5	72.1	25.4
Cyprus (55)	1.8	34.5	63.6
Ireland (61)	1.6	80.3	18.0
Spain (638)	0	29.8	70.2

Table C.11Proportion (%) of non-bird species assessments in each change class (genuine,
no change, non-genuine), per Member State (2007-2012) (see Figure 3.6)

Notes: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 5 752. Greece did not provide an Article 12 report.

3.2 Conservation status at EU regional level

Table C.12Proportion (%) of habitat assessments in each conservation status class (FV,
U1, U2, XX), per biogeographical and marine region (2007-2012) (see Figure 3.9)

Biographical region	Favourable (FV)	Unknown (XX)	Unfavourable- inadequate (U1)	Unfavourable-bad (U2)
STE (24)	50.0	4.2	41.7	4.2
MAC (36)	36.1	8.3	36.1	19.4
ALP (117)	25.6	8.5	47.0	18.8
MED (139)	19.4	10.1	45.3	25.2
PAN (56)	14.3	0	58.9	26.8
CON (153)	13.1	3.3	49.7	34.0
BOR (82)	11.0	2.4	35.4	51.2
BLS (51)	9.8	0	88.2	2.0
ATL (111)	4.5	9.0	35.1	51.4
Marine region				
MMAC (6)	33.3	50.0	16.7	0
MBLS (7)	14.3	0	85.7	0
MATL (7)	0	28.6	0	71.4
MBAL (7)	0	14.3	42.9	42.9
MMED (8)	0	37.5	37.5	25.0

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 804.

Table C.13Conservation status and trends in conservation status for habitats assessed as
unfavourable per biogeographical and marine region (see Figure 3.10)

Biographical region	Favourable	Unfavourable- improving	Unfavourable- unknown-trend	Unknown	Unfavourable- stable	Unfavourable- declining
STE (24)	50.0	0.0	16.7	4.2	29.2	0.0
MAC (36)	36.1	0.0	13.9	8.3	27.8	13.9
ALP (117)	25.6	0.0	6.8	8.5	26.5	32.5
MED (139)	19.4	0.7	18.0	10.1	16.5	35.3
PAN (56)	14.3	3.6	0.0	0.0	48.2	33.9
CON (153)	13.1	3.9	9.2	3.3	41.2	29.4
BOR (82)	11.0	9.8	6.1	2.4	22.0	48.8
BLS (51)	9.8	0.0	2.0	0.0	80.4	7.8
ATL (111)	4.5	10.8	10.8	9.0	36.0	28.8
Marine region						
MMAC (6)	33.3	16.7	0.0	50.0	0.0	0.0
MBLS (7)	14.3	0.0	0.0	0.0	42.9	42.9
MATL (7)	0.0	42.9	0.0	28.6	0.0	28.6
MBAL (7)	0.0	0.0	0.0	14.3	14.3	71.4
MMED (8)	0.0	0.0	25.0	37.5	25.0	12.5

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 804.

Source: EEA, 2015b, Article 17 reports and assessments.

Table C.14Proportion (%) of species assessments in each conservation status class (FV,
U1 U2 XX), per biogeographic and marine region (2007-2012) (see Figure 3.15)

Biographical region	Favourable (FV)	Unknown (XX)	Unfavourable- inadequate (U1)	Unfavourable-bad (U2)
BLS (132)	31.8	8.3	52.3	7.6
ALP (390)	31.3	9.0	43.8	15.9
BOR (177)	27.1	5.6	38.4	28.8
MAC (182)	26.9	25.8	25.8	21.4
PAN (212)	23.1	3.8	59.9	13.2
MED (673)	22.7	28.7	33.1	15.5
ATL (235)	19.6	11.5	37.0	31.9
CON (416)	18.8	7.2	52.4	21.6
STE (119)	15.1	7.6	71.4	5.9
Marine region				
MBAL (5)	20.0	0	20.0	60.0
MATL (48)	12.5	75.0	2.1	10.4
MMED (32)	9.4	34.4	28.1	28.1
MMAC (41)	2.4	87.8	9.8	0
MBLS (3)	0	33.3	33.3	33.3

Notes: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 2 665.

Table C.15Conservation status and trends in conservation status for non-bird species
assessed as unfavourable per biogeographic and marine region
(see Figure 3.16)

Biographical region	Favourable	Unfavourable -improving	Unfavourable -unknown- trend	Unknown	Unfavourable -stable	Unfavourable -declining
BLS (132)	31.8	1.5	14.4	8.3	8.3	35.6
ALP (390)	31.3	3.8	11.3	9.0	20.0	24.6
BOR (177)	27.1	9.0	7.3	5.6	28.2	22.6
MAC (182)	26.9	12.1	5.5	25.8	15.4	14.3
PAN (212)	23.1	2.8	12.3	3.8	36.8	21.2
MED (673)	22.7	3.0	16.6	28.7	12.3	16.6
ATL (235)	19.6	6.8	14.0	11.5	27.2	20.9
CON (416)	18.8	3.8	14.2	7.2	23.3	32.7
STE (119)	15.1	0	41.2	7.6	22.7	13.4
Marine region						
MBAL (5)	20.0	60.0	20.0	0	0	0
MATL (48)	12.5	0	0	75.0	6.3	6.3
MMED (32)	9.4	3.1	37.5	34.4	12.5	3.1
MMAC (41)	2.4	2.4	7.3	87.8	0	0
MBLS (3)	0	0	33.3	33.3	0	33.3

Notes: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 2 665.

3.3 Pressures and threats

Table C.16Frequency (%) of total number of pressures and threats (together) reported for
habitats and non-bird species, and percentage of reported ranked 'high impact'
(see Figures 3.19 and 3.20)

	н	abitats	Non-bird species		
Level 1 category	Overall (³)	High impact (4)	Overall	High impact	
A - Agriculture	14.9	19.1	18.5	17.6	
B - Forestry	8.7	7.2	11.0	12.6	
C - Mining, quarrying and energy production	4.4	4.0	3.8	2.8	
D - Transportation and service infrastructure	6.5	2.1	5.7	4.1	
E - Urbanisation, residential and commercial development	8.5	5.1	7.6	7.0	
F - Use of living resources (other than agriculture and forestry)	3.8	3.2	6.5	5.2	
G - Disturbances due to human activities	10.5	7.3	7.9	6.8	
H - Pollution	9.4	10.8	7.3	6.0	
I - Invasive and introduced species	5.9	6.7	3.2	3.9	
J - Modification of natural conditions	10.0	18.3	12.9	21.3	
K - Natural processes (excluding catastrophes)	10.2	12.0	9.0	9.4	
L - Geological events, natural catastrophes	2.4	1.4	1.7	0.8	
M - Climate change	4.4	2.7	3.5	2.6	
U - Unknown threat or pressure	0.1		0.7		
X - No pressures or threats	0.3		0.5		
XE - Threats and pressures from outside the EU territory	< 0.1		0.1	< 0.1	
XO - Threats and pressures from outside the Member State	< 0.1		0.1	0.1	

Notes: Greece did not provide an Article 12 report.

^{(&}lt;sup>3</sup>) This figure is calculated by dividing the number of pressures or threats (aggregated at level 2) per category by the total number of pressures or threats reported and aggregated at Level 2 (21 979 entries for habitats and 37 976 for species).

^{(&}lt;sup>4</sup>) This figure is calculated by dividing the number of 'high importance/impact' pressures or threats (aggregated at Level 2) within a given category by the total number of 'high importance/impact' pressures or threats reported and aggregated at Level 2 (5 128 entries for habitats and 11 011 for species).

Table C.17 Frequency (%) of total number of pressures and threats reported for habitats and percentage of reported ranked 'high impact'

	Pressures		Threats	
Level 1 category - Habitats	Overall (⁵)	High impact (⁶)	Overall	High impact
A - Agriculture	15.3	19.9	14.7	18.6
B - Forestry	9.1	7.3	8.6	6.6
C - Mining, quarrying and energy production	4.3	4.0	4.4	3.8
D - Transportation and service infrastructure	6.6	1.9	6.3	2.3
E - Urbanisation, residential and commercial development	8.6	5.2	8.4	4.8
F - Use of living resources (other than agriculture and forestry)	3.9	3.4	3.9	3.4
G - Disturbances due to human activities	10.8	7.5	10.4	7.2
H - Pollution	9.5	10.8	9.5	10.9
I - Invasive and introduced species	5.8	6.5	6.0	6.6
J - Modification of natural conditions	10.4	19.7	10.3	18.4
K - Natural processes (excluding catastrophes)	10.2	11.7	10.2	13.0
L - Geological events, natural catastrophes	1.9	1.0	2.4	1.3
M - Climate change	3.0	1.2	4.6	3.1
U - Unknown threat or pressure	0.1		0.1	
X - No pressures or threats	0.2		0.2	
XE - Threats and pressures from outside the EU territory	<0.1		<0.1	
XO - Threats and pressures from outside the Member State	<0.1		<0.1	

Notes: Greece did not provide an Article 17 report.

^{(&}lt;sup>5</sup>) This figure is calculated by dividing the number of entries (aggregated at Level 2) per category by the total number of pressures/threats reported and aggregated at Level 2 (20 137 pressures and 20 505 threats).

^{(&}lt;sup>6</sup>) This figure is calculated by dividing the number of 'high importance/impact' entries (aggregated at Level 2) within a given category by the total number of 'high importance/impact' pressures/threats reported and aggregated at Level 2 (4 418 pressures and 4 389 threats).

Table C.18	Frequency (%) of total number of pressures and threats reported for non-bird
	species, and percentage of reported ranked 'high impact'

Level 4 externel. New bird energies	Pressures		Threats	
Level 1 category – Non-bird species	Overall ⁷	High impact ⁸	Overall	High impact
A - Agriculture	19.1	18.7	18.4	17.1
B - Forestry	11.1	12.5	10.8	12.5
C - Mining, quarrying and energy production	3.5	2.2	3.8	2.8
D - Transportation and service infrastructure	5.8	3.7	5.7	4.1
E - Urbanisation, residential and commercial development	7.7	6.8	7.5	6.7
F - Use of living resources (other than agriculture and forestry)	6.6	5.5	6.4	5.2
G - Disturbances due to human activities	7.9	6.9	7.9	6.9
H - Pollution	7.6	6.2	7.3	6.0
I - Invasive and introduced species	3.1	3.7	3.2	4.1
J - Modification of natural conditions	13.3	22.0	13.3	21.6
K - Natural processes (excluding catastrophes)	8.8	9.0	9.2	9.4
L - Geological events, natural catastrophes	1.5	0.8	1.7	0.8
M - Climate change	2.4	1.9	3.7	2.7
U - Unknown threat or pressure	0.7		0.6	
X - No pressures or threats	0.5		0.4	
XE - Threats and pressures from outside the EU territory	0.1	<0.1	0.1	<0.1
XO - Threats and pressures from outside the Member State	0.1	0.1	0.1	0.1

Note: No Article 17 report was provided by Greece

^{(&}lt;sup>7</sup>) This figure is calculated by dividing the number of entries (aggregated at Level 2) per category by the total number of pressures/threats reported and aggregated at Level 2 (34 239 pressures and 34 965 threats).

^{(&}lt;sup>8</sup>) This figure is calculated by dividing the number of 'high importance/impact' entries (aggregated at level 2) within a given category by the total number of 'high importance/impact' pressures/threats reported and aggregated at level 2 (9 350 pressures and 9 724 threats).

			Range				Area		Structure and functions	Future prospects	Overall as	sessment
	Area	Trend	Reference value	Conclusion	Area	Trend	Reference value	Conclusion	Conclusion	Conclusion	Conclusion	Conclusion trend
Austria	2	18	11	11	5	30	14	11	26	8	7	46
Belgium		8		1		16	2	1	4	1	1	20
Bulgaria		99	1	1		99		1	1	1	1	
Cyprus												
Czech Republic		100				5			1	1	1	
Germany	6	7	1	5	20	10	4	9	3	6	2	11
Denmark	1	4	5	4		63	19	10	5	5	5	31
Estonia		7	7			8	13	2	3	3		14
Spain	1	16	16	15	5	43	32	36	51	28	25	40
Finland			1	2	4	2	1	3	1	1	1	
France		5	5	7	7	7	9	10	6	11	4	7
Hungary						4	2					
Ireland					2	2	2					6
Italy		16	7	14		16	7	14	13	12	10	16
Lithuania		2				11		11	15	6	6	
Luxembourg		46				54						29
Latvia		18	2	7		25	7	9	7	16	4	22
Malta		10				10			10			6
Netherlands		4				6				4		14
Poland		15	3	10	8	29	9	11	11	11	10	5
Portugal		12	18	19	72	9	7	4	8	33	4	13
Romania		4	34	2		5	35	2	2	5	1	36
Sweden						10			3	3	2	13
Slovenia		1			2	3	7	2	7	3	1	
Slovakia		9		6		10	1	11	6	9	6	
United Kingdom		2	5	5	14	13	14	17	3	6	3	

 Table C.19
 Percentage of obligatory fields not completed for Annex I habitats, with values greater than 50% highlighted in orange

	Maps	Pressures and threats	Natura 2000 coverage	Conservation measures
Austria	3	1	7	1
Belgium				
Bulgaria				
Cyprus				
Czech Republic				
Germany			1	2
Denmark	2	1	2	7
Estonia			2	
Spain		7	1	
Finland		2		1
France		1	12	26
Hungary				
Ireland			2	
Italy			3	11
Lithuania			13	9
Luxembourg				
Latvia				
Malta				
Netherlands				2
Poland			4	1
Portugal			50	
Romania	11	1	8	10
Sweden				2
Slovenia			4	8
Slovakia				
United Kingdom				

Notes: An empty value means the Member State reported no missing or unknown data; 0 is a rounded value, which means the Member State reported few missing or unknown values. Greece did not provide an Article 12 report.

			Range				Population			Hab	oitat for spec	ies	Future prospects	Overall as	sessment
	Area	Trend	Reference value	Conclusion	Size	Trend	Reference value	Conclusion	Area	Trend	Reference value	Conclusion	Conclusion	Conclusion	Conclusion trend
Austria	2	28	4	4	2	39	9	6	3	29	71	5	5	2	31
Belgium		14	7	12	2	23	18	18	30	43	84	35	20	12	19
Bulgaria	5	93	7	8	6	85	9	11	5	89	26	9	12	8	11
Cyprus	4	35	13	13	2	44	40	31	4	25	80	18	16	16	13
Czech Republic	0	3	2	3	1	10	4	5	3	6	100	4	9	4	6
Germany	5	17	11	14	9	23	16	19	10	20	37	17	19	15	15
Denmark	23	61	28	26	23	61	29	30	28	69	96	33	27	26	66
Estonia		19	28	6		16	38	10		22	98	16	10	9	14
Spain	2	34	18	21	4	42	42	39	2	42	4	31	34	25	26
Finland		13	6	4		37	13	12		18	99	6	11	7	19
France	0	12	11	12	29	30	23	28	55	24	83	19	38	14	18
Hungary		5	3	1		24	4	7		9	6	2	4	1	19
Ireland		9	3	3		41	43	19		10	24	2	19	18	6
Italy	1	8	7	6	2	23	16	19	97	12	94	8	12	10	8
Lithuania	1	15	2	5	2	22	2	15	1	26	91	14	23	8	27
Luxembourg	4	18	11	9	11	29	20	16	18	50	29	11	29	7	41
Latvia		26	7	9	1	42	12	18	3	39	31	18	25	12	41
Malta	6	27	21	19	6	29	27	19	6	13	33	13	15	15	17
Netherlands		11	1	5	1	15	1	5		15	1	7	8	4	11
Poland	2	43	25	21	2	56	52	28	44	51	49	20	19	17	32
Portugal	4	22	28	32	60	70	61	60	63	51	77	52	51	41	53
Romania	1	10	9	7	2	12	8	9	2	12	39	8	10	8	58
Sweden		6	0		0	7	1	0	1	5	41	2	1		12
Slovenia		18	9	10	2	47	34	38	2	37	100	16	27	20	33
Slovakia		18	1	20		24	1	26		29	38	21	31	19	2
United Kingdom	1	16	5	5	5	23	17	20	34	41	71	21	22	16	2

Table C.20 Percentage of obligatory fields not completed for non-bird species, with values greater than 50 % highlighted in orange

	Maps	Pressures and threats	Natura 2000 coverage	Conservation measures
Austria	1	1	6	1
Belgium		3	2	
Bulgaria	6	5	2	
Cyprus	4	5	3	3
Czech Republic	1		1	
Germany	6	6	10	6
Denmark	33	6	32	6
Estonia		5		
Spain	2	4	6	1
Finland		5		
France	0	1	53	43
Hungary	0		1	1
Ireland				
Italy	1	3	100	19
Lithuania	3	3		
Luxembourg	3			
Latvia	2	7	3	2
Malta	6			
Netherlands				
Poland		5	7	
Portugal	3	4	66	2
Romania	13	5	4	7
Sweden	3	2	7	11
Slovenia	1	15	7	10
Slovakia				
United Kingdom	1	1	23	2

Notes: An empty value means the Member State reported no missing or unknown data; 0 is a rounded value, which means the Member State reported few missing or unknown values. Greece did not provide an Article 12 report.

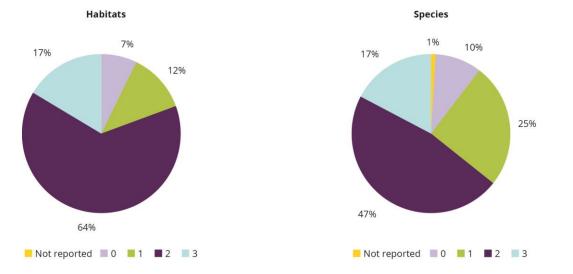
Further information on data quality and completeness

This section complements Section 3.4.

Methods for estimating habitat area and population size

The most frequently used method for estimating both habitat area and population size was 'estimate based on partial data with some extrapolation and/or modelling' (see Figure C.3). Estimates based on complete surveys or statistically robust estimates (usually with well-designed sampling schemes) were only used for 17 % of habitat and species assessments, suggesting that relatively little data stem from well-designed monitoring programmes.

Figure C.3 Methods used to estimate a) area of Annex I habitats (left) and b) populations of Annex II, IV and V species (right) by the Member State



Notes: 0 = Absent data; 1 = Estimate based on expert opinion with no or minimal sampling; 2 = Estimate based on partial data with some extrapolation and/or modelling; 3 = Complete survey or a statistically robust estimate. The total number of assessments is 3 022 and 6 759, respectively for habitats and species. Notes: An empty value means the Member State reported no missing or unknown data; 0 is a rounded value, which means the Member State reported few missing or unknown values. Greece did not provide an Article 12 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Habitat area

The proportion of terrestrial area of each Member State reported as being covered by Annex I habitats varies greatly. As expected, the percentage is quite low in most countries, particularly those from northwest Europe like Belgium, Germany and the United Kingdom, where intensive agriculture and urban areas cover large proportions of the landscape. However, the areas reported for terrestrial Annex I habitats in Romania are equivalent to 250 % of the land area and clearly show that at least some of the habitat areas reported must be wrong. Some of the French areas are also unrealistically high as the area of Annex I habitats reported for the Atlantic biogeographical region is 103 % of the region.

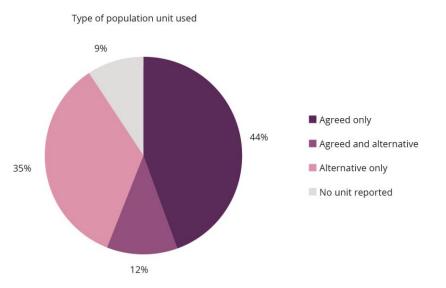
Countries reported both habitat area (in kilometres squared) and distribution using a 10 km x 10 km grid; as expected, there is a good correlation between the reported area and the area of grid cells when habitat areas are summed across all regions. However, Romania shows the reported area for many habitats as more or less equal to the area of the gridded distribution, and in some cases, larger.

Consequently, many EU regional assessments involving Romanian data used weighting by area of distribution rather than with the preferred method of weighting by area.

Population units

For the 2007-to-2012 period, it was agreed that, other than for an approved list of 68 exceptions, the unit for populations would be the 'individual'. Member States had the option of reporting by using another unit of their choice as well as the agreed unit. The exceptions included all bryophytes plus some invertebrates, often species living in old or dead trees where the agreed unit was 'number of inhabited trees'. Although this led to much less variation in population units than for the period from 2001 through 2006, many countries did not use the agreed unit (see Figure C.4). There was also some misunderstanding over the agreed exceptions, as seen with the snail *Vertigo angustior* where a mix of area (the agreed unit) and individuals was used. The continued use of varying population units meant that weighting by population size (the preferred method) could often not be used and that it is not yet possible to provide EU population sizes for most species.

Figure C.4 Proportion of Member State assessments using the agreed or alternative units for population



Notes: The total number of assessments 6 759. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Range

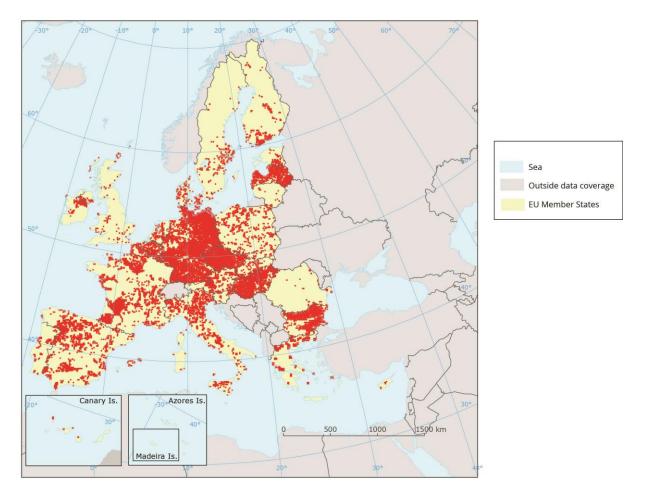
In the 2001-to-2006 period, it was clear that a large variety of methods had been used to estimate range, and so for the 2007-to-2012 report, a GIS based tool was made available to Member States. This was used by most countries, although some, such as Germany and the United Kingdom, used their own tools based on the same principles. Lithuania did not use a GIS tool while for some habitats and species, Cyprus used the same map as for range and distribution.

Habitat interpretation

It has been known for some time that countries may interpret Annex I habitats in different ways (Evans, 2010) and this is evident in several habitat reports. For example, differences in the distribution of a habitat such as '3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type

vegetation' (see Map C.1) between countries such as Lithuania and Latvia, Germany and Poland or Bulgaria and Romania are probably due to differences in interpretation and mapping methodologies. Some of these problems have been discussed in the biogeographical seminars held to review site proposals (Evans, 2012), while the recently launched 'Natura 2000 biogeographical process' (⁹) provides a platform for future discussion.

Map C.1 Distribution of habitat 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition type vegetation.



Source: EEA, 2015b, Article 17 reports and assessments.

Taxonomical problems

Most of the Habitats Directive annexes were drafted based on taxonomical knowledge in the 1980s, but since then many species listed in Annexes II, IV and V have undergone taxonomic revision. Several taxa treated as species in the annexes are now considered to be two or more species; less often, other taxa are now considered as part of a wider species. This is a particular problem with fish, but it also affects other groups, especially in southern Europe.

These changes make it difficult to compare the 2001-to-2006 and the 2007-to-2012 reports, and can lead to problems with EU regional assessments when some countries use the revised taxonomy while others do not. A checklist (¹⁰), prepared by the ETC/BD and validated by the Member States prior to

⁹ http://ec.europa.eu/environment/nature/natura2000/platform/index_en.htm

¹⁰http://bd.eionet.europa.eu/activities/Reporting Tool/Documents/Art17 %20Check lists%20for%20habitats sp ecies.pdf

reporting, takes into account taxonomic changes since Annexes II, IV and V were published and lists species corresponding to higher level taxonomic units listed in the annexes (e.g. Microchiroptera, and Cetacea). This reduced the taxonomic problems compared to the 2001-to-2006 report, but some 40 species remained problematic, mainly when comparing the 2001-to-2006 status with the 2007-to-2012 status.

Cases where countries used different taxonomical approaches were rather exceptional in comparison to the 2001-to-2006 period, but some taxa require further work if future reports are to contain coherent assessments of populations across the entire EU. For example, the fish *Alburnus albidus* is considered to be a species restricted to southern Italy by Italy, but in the former Yugoslav countries (including Slovenia), it is considered a synonym of *Alburnus arborella*, a species occurring in the Adriatic basin and northern Italy. Both Italy and Slovenia treated the species in line with their taxonomic traditions in their national reports. Such cases result in incomplete or incoherent EU regional assessments; in this particular instance, the EU regional assessment for the Mediterranean region represents *A. albidus*, while the Continental regional assessment under the same name is based on the Slovenian populations of *A. arborella*.

As well as complicating EU regional assessments, taxonomic changes also cast doubts on data reliability, especially for trends. For example, the bat *Pipistrellus pygmaeus* was only recognised as a distinct species in the early 1990s, which means that earlier records for *Pipistrellus pipistrellus* cannot always be associated with the correct species.

Threats and pressures

The use of an agreed hierarchical list of threats and pressures, limited to a maximum of 20 per assessment and with up to 5 noted as 'highly important', allowed for greater analysis than the previous report. However, it is sometimes difficult to aggregate at a given level — How does one assessment with two or more Level 3 pressures reported as 'medium' compare to an assessment with a single Level 2 pressure noted as 'high'?

There are marked differences for the proportion of pressures across the 3 categories among countries, with 'high' varying from 65 % (the Netherlands) to 10 % (Slovakia) for habitats, and from 46 % (Lithuania) to 5 % (Slovakia) for species.

There are also some differences in the way Member States have applied the ranking: for example, although Romania has no 'high' pressures for any freshwater habitats, countries upstream of the Danube basin often note pressures on river habitats as 'high'. Similarly, it appears that various countries allocated a similar pressure to different categories; see Box 3.1 on nitrogen deposition, for instance.

Spatial data

For the 2007-to-2012 reports, data standards for spatial data were agreed, and this has generated a data set which is more homogeneous, although little is known of the source data. In some cases, there were minor problems when maps of range and distribution were transferred from national projections to the agreed European Terrestrial Reference System 1989 (ETRS89) grid, particularly for Poland and the United Kingdom.

It is apparent that the maps from some countries have improved, and where weighting uses gridded distribution, this can have an impact on the EU regional assessment. For example, the French proportion of the habitat '3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.' in the Atlantic biogeographic region fell from 79 % (2001–2006) to 28 % (2007–2012).

Problems with national data and assessments

There are potential problems with some Member State assessments, with possible implications for the EU regional assessment, particularly in terms of the weighting choices. Table C.21 summarises some of

these problems: it is not intended to be exhaustive, but rather to highlight issues in order to help improve future reports. Such issues tend to be more frequent in, but are not restricted to, south-eastern Europe.

Table C.21 A summary of some potential problems and issues with the national assessments

Potential issue	Examples
Distribution maps based on a modelling approach which appears to overestimate the actual distribution and population	Bulgaria
Population data for species very poor with no value for population size for more than 50 % of assessments	Portugal
Very little information for trends of range, habitat area or population	Bulgaria
Actual and reference values of parameters range, population and habitat for the species the same for most species	Bulgaria
Range and distribution the same for many habitats and species	Cyprus
Large proportion of habitat assessments with no area, necessitating weighting by gridded distribution	Portugal
Area of gridded distribution equal to or larger than the reported area, making weighting by gridded distribution difficult, as the proportion of habitats in Romania was overestimated.	Romania
More than 50 % of habitat assessments are favourable, but have no favourable reference range or favourable reference area	Romania
Species reported as favourable, while reported as regionally extinct or critically endangered in national Red Data books/lists.	Bulgaria
Distribution and range maps produced using the UK national grid then transformed to the agreed ETRS 89 LAEA grid, sometimes resulting in parts of the distribution being outside the range.	United Kingdom
No information on coverage by Natura 2000 for more than half of habitat assessments	Portugal
No information on coverage by Natura 2000 for more than half of species assessments	France, Italy, Portugal

Table C.22Proportion (%) of habitat assessments in each conservation status class
(FV, U1, U2, XX) per Annex I category (2007-2012) (see Figure 3.11)

Annex I category	Favourable (FV)	Unknown (XX)	Unfavourable- inadequate (U1)	Unfavourable-bad (U2)
Rocky habitats (70)	34.3	21.4	35.7	8.6
Sclerophyllous scrub (33)	30.3	6.1	57.6	6.1
Heath and scrub (42)	26.2	2.4	45.2	26.2
Freshwater habitats (94)	16.0	10.6	56.4	17.0
Forests (227)	15.0	4.8	53.3	26.9
Bogs, mires and fens (55)	14.5	1.8	32.7	50.9
Grasslands (122)	12.3	3.3	40.2	44.3
Coastal habitats (94)	10.6	10.6	44.7	34.0
Dunes habitats (67)	7.5	0.0	44.8	47.8

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 804.

Source: EEA, 2015b, Article 17 reports and assessments.

Table C.23 Conservation status and trends in conservation status for habitats assessed as unfavourable per Annex I category (see Figure 3.12)

Annex I category	Favourable	Unfavourable- improving	Unfavourable- unknown- trend	Unknown	Unfavourable- stable	Unfavourable- declining
Rocky habitats (70)	34.3	2.9	4.3	21.4	27.1	10.0
Sclerophyllous scrub (33)	30.3	0	3.0	6.1	36.4	24.2
Heath and scrub (42)	26.2	2.4	16.7	2.4	31.0	21.4
Freshwater habitats (94)	16.0	5.3	3.2	10.6	34.0	30.9
Forests (227)	15.0	3.5	9.3	4.8	39.2	28.2
Bogs, mires and fens (55)	14.5	7.3	9.1	1.8	20.0	47.3
Grasslands (122)	12.3	2.5	13.9	3.3	25.4	42.6
Coastal habitats (94)	10.6	7.4	10.6	10.6	28.7	31.9
Dunes habitats (67)	7.5	4.5	13.4	0	47.8	26.9

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 804.

Table C.24Proportion (%) of species assessments in each conservation status class
(FV, U1 U2 XX) per taxonomic group (2007-2012) (see Figure 3.17)

Taxonomic group	Favourable (FV)	Unknown (XX)	Unfavourable- inadequate (U1)	Unfavourable-bad (U2)
Vascular plants (842)	28.6	17.0	39.2	15.2
Amphibians (182)	28.0	11.0	46.2	14.8
Reptiles (215)	25.1	22.3	40.9	11.6
Mammals (495)	21.2	24.2	41.8	12.7
Arthropods (415)	18.3	17.8	42.9	21.0
Non-vascular plants (99)	18.2	12.1	41.4	28.3
Molluscs (99)	18.2	18.2	30.3	33.3
Fish (304)	16.8	3.9	49.0	30.3
Other invertebrates (14)	14.3	50.0	28.6	7.1

Notes: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 2 665.

Source: EEA, 2015b, Article 17 reports and assessments.

Table C.25	Conservation st	tatus and	trends i	conservation	status for	species
	assessed as unf	avourable	per taxon	omic group (see	Figure 3.18)	-

Taxonomic group	Favourable	Unfavourable- improving	Unfavourable- unknown- trend	Unknown	Unfavourable- stable	Unfavourable- declining
Vascular plants (842)	28.6	4.6	13.3	17.0	19.6	16.9
Amphibians (182)	28.0	2.2	13.7	11.0	17.0	28.0
Reptiles (215)	25.1	1.9	19.5	22.3	8.4	22.8
Mammals (495)	21.2	6.1	12.5	24.2	24.2	11.7
Arthropods (415)	18.3	4.3	17.8	17.8	18.6	23.1
Non-vascular plants (99)	18.2	2.0	17.2	12.1	30.3	20.2
Molluscs (99)	18.2	2.0	11.1	18.2	22.2	28.3
Fish (304)	16.8	6.3	12.8	3.9	19.1	41.1
Other invertebrates (14)	14.3	0	0	50.0	14.3	21.4

Notes: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 2 665.

Table C.26Proportion of assessments reported as 'unknown' (2007-2012 and
2001-2006) for habitats and non-bird species (see Figure 3.21)

	No of asso 'unkn		Total no of a	issessments	Proportio 'unknown' a	
	2001-2006	2007-2012	2001-2006	2007-2012	2001-2006	2007-2012
Non-bird species						
EU total	1 734	957	6 064	6 759	28.6	14.2
Sweden	8	0	262	281	3.1	0
Hungary	34	3	207	209	16.4	1.4
Austria	15	8	290	339	5.2	2.4
Netherlands	5	3	84	79	6.0	3.8
Czech Republic	20	13	253	267	7.9	4.9
Luxembourg	4	4	59	60	6.8	6.7
Finland	16	11	144	150	11.1	7.3
Lithuania	14	8	103	98	13.6	8.2
Romania		48		570		8.4
Bulgaria		38		437		8.7
Italy	77	53	564	547	13.7	9.7
Estonia	25	11	96	99	26.0	11.1
Latvia	23	13	112	113	20.5	11.5
Belgium	32	16	136	134	23.5	11.9
France	164	91	658	637	24.9	14.3
Germany	115	55	480	366	24.0	15.0
United Kingdom	23	16	93	104	24.7	15.4
Malta	20	8	55	52	36.4	15.4
Cyprus	31	9	50	55	62.0	16.4
Poland	50	49	270	272	18.5	18.0
Ireland	17	11	67	61	25.4	18.0
Slovakia	103	62	320	319	32.2	19.4
Slovenia	68	64	336	328	20.2	19.5
Spain	472	159	646	638	73.1	24.9
Denmark	20	33	108	122	18.5	27.0
Portugal	225	171	429	422	52.4	40.5
Greece	153	0	242	0	63.2	100
Habitats						
EU total	407	163	2756	3022	14.8	5.4
Netherlands	0	0	51	52	0	0
Malta	9	0	31	30	29.0	0
Luxembourg	16	0	29	28	55.2	0
Ireland	0	0	59	58	0	0
Hungary	1	0	46	46	2.2	0
Estonia	5	0	60	60	8.3	0
Cyprus	19	0	48	42	39.6	0
Czech Republic	0	1	95	93	0	1.1

	No of ass 'unkn		Total no of a	ssessments	Proportio 'unknown' a	
	2001-2006	2007-2012	2001-2006	2007-2012	2001-2006	2007-2012
Belgium	2	1	87	93	2.3	1.1
Finland	1	1	92	92	1.1	1.1
Bulgaria		2		184		1.1
Slovenia	0	1	89	89	0	1.1
Germany	10	4	193	192	5.2	2.1
Sweden	7	4	183	187	3.8	2.1
Romania		4		168		2.4
United Kingdom	5	3	87	87	5.7	3.4
Latvia	3	2	57	57	5.3	3.5
France	20	11	303	297	6.6	3.7
Portugal	14	6	158	156	8.9	3.8
Denmark	26	5	108	111	24.1	4.5
Lithuania	2	3	54	54	3.7	5.6
Slovakia	11	6	102	101	10.8	5.9
Austria	16	9	112	124	14.3	7.3
Poland	2	11	112	116	1.8	9.5
Italy	22	27	269	261	8.2	10.3
Spain	213	62	246	244	86.6	25.4
Greece	3	0	85	0	3.5	100

Notes: Non-bird species are species from the Habitats Directive. A mean per category across all Member States is provided (EU total). The total number of assessments for habitats is 2 756 and 3 022 for the reporting periods 2001-2006 and 2007-2012, respectively. The total number of assessments for non-bird species is 6 064 and 6 759 for the reporting periods 2001-2006 and 2007-2012, respectively. Greece did not provide an Article 17 report.

		Ra	ange			Area o	f habitat		
Member State	Value	æ	Other operators	х	Value	ĸ	Other operators	x	Total
Austria		65	44	15		39	67	18	124
Belgium	7	77	9		25	23	43	2	93
Bulgaria		182		2	2	182			184
Cyprus		42				42			42
Czech Republic		93				80	13		93
Germany	22	146	22	2	35	92	58	7	192
Denmark		104	2	5		74	16	21	111
Estonia		56		4		48	4	8	60
Spain	5	163	36	40	5	105	56	78	244
Finland	1	78	12	1	1	54	36	1	92
France		233	49	15		141	129	27	297
Hungary		40	6			15	30	1	46
Ireland	4	54			13	30	14	1	58
Italy		141	101	19		105	138	18	261
Lithuania		54				36	18		54
Luxembourg		21	7			13	15		28
Latvia	1	48	7	1	7	17	29	4	57
Malta		23	7			23	7		30
Netherlands		40	12			21	31		52
Poland		113		3	5	89	12	10	116
Portugal		124	4	28		70	75	11	156
Romania		100	9	59		79	29	60	168
Sweden	9	178			86	98	3		187
Slovenia		84	5			49	34	6	89
Slovakia		77	24		1	60	39	1	101
United Kingdom	5	75	3	4	24	38	13	12	87
Total	54	2411	359	198	204	1623	909	286	3022

Table C.27 Favourable reference values reported for habitats, by Member State

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 3 022. Greece did not provide an Article 17 report.

		Ra	ange			Рор	ulation		
Member State	Value	ĸ	Other operators	x	Value	ĸ	Other operators	x	Total
Austria	8	129	190	12		68	239	32	339
Belgium		94	31	9		34	75	25	134
Bulgaria		395	7	35	12	342	6	77	437
Cyprus		46	2	7	3	15	14	23	55
Czech Republic	9	169	81	8		102	152	13	267
Germany	65	179	72	50	8	37	130	191	366
Denmark		49	34	39	4	38	38	42	122
Estonia		64	6	29		52	7	40	99
Spain	27	312	176	123	19	182	145	292	638
Finland		113	23	14		75	49	26	150
France	1	385	178	73	7	201	273	156	637
Hungary		147	56	6		113	87	9	209
Ireland	9	47		5	8	14	1	38	61
Italy	1	401	100	45	1	294	150	102	547
Lithuania		89	7	2		41	52	5	98
Luxembourg	3	33	17	7		19	28	13	60
Latvia	6	73	26	8	3	50	43	17	113
Malta		35	6	11		31	7	14	52
Netherlands		51	24	4		38	37	4	79
Poland	8	160	33	71	11	76	39	146	272
Portugal		236	64	122		89	68	265	422
Romania		306	214	50		138	385	47	570
Sweden	62	208	1	10	109	121		51	281
Slovenia		262	37	29		119	98	111	328
Slovakia		188	129	2	12	195	110	2	319
United Kingdom	46	48	5	5	15	33	11	45	104
Total	245	4219	1519	776	212	2517	2244	1786	6759

Table C.28 Favourable reference values reported for species, by Member State

Notes: These are species from the Habitats Directive. The total number of assessments is 6 759. Greece did not provide an Article 17 report.

Annex D (Chapter 4)

Linking birds, non-bird species and habitats with MAES ecosystems for EU biogeographical and marine regions

There is an increasing need for reporting on the state and trends of biodiversity from an ecosystem perspective, particularly in order to facilitate communication with sectors such as agriculture, fisheries or forestry. The *EU 2010 Biodiversity Baseline* (EEA, 2010) presented the results (alongside other indicators) from the first round of reporting by EU Member States under Article 17 of the Habitats Directive per main ecosystem type.

Target 3 of the EU Biodiversity Strategy to 2020 is to 'improve integration in key sectors, specifically through targets and action to enhance the positive contribution of the agriculture, forest and fisheries sectors to biodiversity conservation and sustainable use'. The assessment of progress towards this target calls for the development of statistics showing, inter alia, the conservation status of species and habitats of European concern linked to agro-ecosystems and forest ecosystems.

While linking habitat types to broad ecosystems is rather straightforward, linking species is more complex, as some of them use different ecosystems during their life cycle. In addition, their ecological requirements may differ depending on the biogeographical context.

Current work on linking species and habitats to ecosystems builds on preliminary work carried out by the EEA's ETC/BD in 2010 in preparation for the aforementioned biodiversity baseline report. The present work aims to establish a reference data set where all habitats and species covered by the Birds and Habitats directives are allocated to ecosystem types as defined by the MAES typology (EC, 2013b). This allocation of species and habitat per ecosystem is performed for each of the nine terrestrial biogeographic regions (according to the Habitats Directive) and each marine region (according to the Marine Strategic Framework Directive).

Species considered in the analysis includes:

- all species of Amphibians, Reptiles and Mammals listed in published European Atlases
- all species listed in Annexes II and IV of the Habitats Directive
- all species of Annex V of the Habitats Directive, except genera *Lycopodium*, *Sphagnum* and *Cladonia*
- all species of naturally occurring birds in the EU (and a small selection of non-native birds) to be reported under Article 12 of the Birds Directive.

Species nomenclature is mainly based on the Annexes of the Habitats and Birds directives;

The allocation of each species and habitat to a specific biogeographical or marine region is based on information extracted from the Natura 2000 database and from the Article 17 database from the first reporting round (2001-2006). For some species, allocation to a given biogeographical or marine region was made by ETC/BD experts.

The characteristics of the links between species and main ecosystem – preferred, suitable, or occasional – are detailed for each species as follows.

P: Preferred ecosystem, which is the most important for the species; the species usually uses this ecosystem during most of its life cycle, or its largest population is linked to it.S: Suitable ecosystem, where the species regularly occurs, but it is not the preferred one.

O: Occasional ecosystem, where the species lives sometimes, but only marginally or a small part of the species population uses this ecosystem.

Method used to allocate habitats and non-bird species to MAES ecosystems

The following rules were applied.

- A terrestrial or freshwater species may have a maximum of **two** preferred ecosystems (P).
- A marine species may have a maximum of **three** preferred ecosystems (P).
- All non-avian species may have several suitable ecosystems (S) and occasional ecosystems (O).
- An anadromous species may be listed in a terrestrial biogeographical region and in a marine region as well. But for the biogeographical region, the species will be only linked to the 'Lakes and Rivers' ecosystem.
- A marine ecosystem may only be allocated to a species listed in a marine region.
- Each terrestrial and freshwater habitat type will be allocated to only **one** preferred ecosystem. Marine habitats may be allocated to several MAES ecosystems following previous work carried out by the ETC/BD (¹¹).
- For bird species, a distinction was made between PB (preferred for breeding) and PW (preferred for wintering).

Method used to allocate bird species to MAES ecosystems

Allocation of MAES ecosystems to birds at European level

- Allocated to a maximum of **three** instead of two ecosystems due to the extension of the geographical coverage.
- If the total MAES across the regions is lower than or equal to three, there is allocation of the same MAES codes.
- If the total MAES across the regions is higher than three:
 - selection is based on the higher numbers of same MAES when possible,
 - if not, allocation is based on the following references:

Tucker and Evans, 1997, *Habitats for Birds in Europe: A Conservation Strategy for the Wider Environment*, BirdLife Conservation Series 6, and associated files' updates in 2013.

• Because allocation to Agricultural mosaics and Croplands was made differently for Birds than for other species, birds linked to agricultural mosaics were checked and when relevant, corrected to be linked to Croplands.

Allocation of MAES ecosystems to birds at biogeographic regional level

- Birds linked to agricultural mosaics were checked again at biogeographic regional level in order to have allocation to croplands when the bird is linked to agricultural mosaics. The check analysis was based on the European MAES allocation, and was based on the same reference.
- Agricultural mosaics: complex of cultivations excluding grasslands.
- For some birds, it was clear that the first allocation to agricultural mosaics was due to the need of presence of treelines and not due to cultivated areas; in that case, it was chosen to link to woodland and forests as most of these birds allocated to agricultural mosaics were already linked to woodlands and forests.

^{(&}lt;sup>11</sup>) Evans, Douglas, Sophie Condé & Eva Royo-Gelabert (2014) *Crosswalks between European marine habitat typologies -A contribution to the MAES marine pilot*. Unpublished report from the ETC/BD

MAES typol	ogy of ecosystems	Representation of habitats			
Major ecosystem category (Level 1)	Ecosystem type (Level 2)	(functional dimension by EUNIS Level 1 and MSFD for marine ecosystems)	Representation of land cover (spatial dimension)		
Terrestrial	Urban	J Constructed industrial and other artificial habitats	Urban, industrial, commercial and transport areas, urban green areas, mines, dump and construction sites		
	Cropland	I Regularly or recently cultivated agricultural, horticultural and domestic habitats	Annual and permanent crops		
	Grassland	E Grasslands and land dominated by forbs, mosses or lichens	Pastures and (semi-) natural grasslands		
	Agricultural mosaics (*)	X Habitat complexes limited to: Crops shaded by trees; Intensively-farmed crops interspersed with strips of semi-natural vegetation; Pasture woods (with a tree layer overlying pasture); Mosaic landscapes with a woodland element (bocages)			
	Woodland and forest	G Woodland, forest and other wooded land	Forests		
	Heathland and shrub	F Heathland, scrub and tundra	Moors, heathland and sclerophyllous vegetation (maquis)		
	Sparsely vegetated land	H Inland unvegetated or sparsely vegetated habitats	Open spaces with little or no vegetation (bare rocks, glaciers and beaches, dunes and sand plains included)		
	Wetlands	D Mires, bogs and fens	Inland wetlands (marshes and peatbogs)		
Freshwater	Rivers and lakes	C Inland surface waters	Water courses and bodies including coastal lakes (without permanent connection to the sea)		
Marine	Marine inlets and transitional waters	Pelagic habitats: Low/reduced salinity water(of lagoons); Variable salinity water (of coastal wetlands, estuaries and other transitional waters); Marine salinity water (of other inlets); Benthic habitats: Littoral rock and biogenic reef; Littoral sediment; Shallow sublittoral rock and biogenic reef; Shallow sublittoral sediment	Coastal wetlands: Saltmarshes, salines and intertidal flats Lagoons: Highly restricted connection to open sea, reduced, often relatively stable, salinity regime Estuaries and other transitional waters: Link rivers to open sea, variable, highly dynamic salinity regime. All WFD transitional waters included Fjords/sea lochs: Glacially derived, typically elongated and deep; marine salinity regime Embayments: Non-glacial origin, typically shallow, marine salinity system Pelagic habitats in this type include the photic zone, while benthic habitats may include it or not		
	Coastal	Pelagic habitats: Coastal waters Benthic habitats: Littoral rock and biogenic reef; Littoral sediment; Shallow sublittoral rock and biogenic reef; Shallow sublittoral sediment	Coastal, shallow-depth marine systems that experience significant land-based influences. These systems undergo diurnal fluctuations in temperature, salinity and turbidity, and are subject to wave disturbance. Depth ranges from 50 m to 70 m. Pelagic habitats in this type include the photic zone, while benthic habitats may include it or not		
	Shelf	Pelagic habitats: Shelf waters Benthic habitats: Shelf sublittoral rock and biogenic reef Shelf sublittoral	Marine systems away from coastal influence, down to the shelf slope. They experience more stable temperature and salinity regimes than coastal systems, and their seabed is below wave disturbance. Depth is up to 200 m. Pelagic habitats in this type include the photic zone, while benthic habitats are beyond the photic limit (aphotic)		
	Open ocean	Pelagic habitats: Oceanic waters Benthic habitats: Bathyal (upper, lower) rock and biogenic reef, Bathyal (upper, lower) sediment, Abyssal rock and biogenic reef, Abyssal sediment	Marine systems beyond the shelf slope with very stable temperature and salinity regimes, in particular in the deep seabed. Depth is beyond 200 m. Pelagic habitats in this type are, in proportion, mostly aphotic, while benthic habitats are aphotic		

Notes: (*) Although the MAES typology does not distinguish agricultural mosaics, it was felt that it would be useful to add this category to the table, to allow for more precise reporting if needed for purposes other than MAES.

Source: EC, 2013b.

Results by Ecosystems

Cropland ecosystem

Table D.1Cropland ecosystems: Top 10 (% of frequency) reported high-ranked
pressures/threats for birds (see Figure 4.7)

Rank	Level 2 category	Pressures and Threats
1.	A02 - Modification of cultivation practices	24.9
2.	A03 - Mowing or cutting grasslands	8.1
3.	A07 - Use of 'pesticides' in agriculture	6.0
4.	A04 - Grazing by livestock	5.6
5.	A10 - Restructuring agricultural parcels	5.6
6.	F03 - Hunting and collection of terrestrial wild animals	5.2
7.	J02 - Changes in waterbodies conditions	5.0
8.	J03 - Other changes to ecosystems	5.0
9.	A06 - Crops of annuals and perennials (non-timber)	3.5
10.	K03 - Interspecific faunal relations	3.5

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 481. Greece did not provide an Article 12 report.

Source: EEA, 2015a, Article 12 reports and assessments.

Table D.2Cropland ecosystems: Top 10 (% of frequency) reported high-ranked
pressures /threats for species (see Figure 4.8)

Rank	Level 2 category	Pressures	Threats	Total
1.	A07 - Use of 'pesticides' in agriculture	11.6	12.4	11.5
2.	A02 - Modification of cultivation practices	11.6	12.6	11.3
3.	E06 - Other urban/industrial developments	11.9	9.1	10.8
4.	G05 - Other human intrusions and disturbances	8.8	8.2	8.1
5.	G01 - Outdoor sports, leisure and recreational activities	7.7	7.1	6.9
6.	J03 - Other changes to ecosystems	5.1	4.4	5.4
7.	D01 - Roads, railroads and paths	4.8	5.5	5.4
8.	A10 - Restructuring agricultural parcels	4.3	4.7	4.7
9.	J02 - Changes in waterbodies conditions	3.7	3.6	3.7
10.	B02 - Forest and plantation management and use	2	1.9	2.7

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 352 and 364, respectively. When pressures and threats are considered together, the total number of distinct entries is 408. No Article 17 report was provided by Greece.

Grassland ecosystem

Table D.3Grassland ecosystems: Top 10 (% of frequency) reported high-ranked
pressures/threats for birds (see Figure 4.11)

Rank	Level 2 category	Pressures and Threats
1.	A02 - Modification of cultivation practices	22.1
2.	A03 - Mowing or cutting grasslands	8.6
3.	A04 - Grazing by livestock	8.0
4.	J02 - Changes in waterbodies conditions	7.2
5.	J03 - Other changes to ecosystems	5.6
6.	F03 - Hunting and collection of terrestrial wild animals	5.1
7.	D02 - Utility and service lines/pipelines	3.9
8.	K03 - Interspecific faunal relations	3.5
9.	A07 - Use of 'pesticides' in agriculture	3.1
10.	A06 - Crops of annuals and perennials (non-timber)	3.0
10.	B01 - Afforestation	3.0

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 764. Greece did not provide an Article 12 report.

Source: EEA, 2015a, Article 12 reports and assessments.

Table D.4Grassland ecosystems: Top 10 (% of frequency) reported high-ranked
pressures /threats for species (see Figure 4.12)

Rank	Level 2 category	Pressures	Threats	Total
1.	A04 - Grazing by livestock	10.1	9.7	9.7
2.	A02 - Modification of cultivation practices	9.9	8.3	9.3
3.	K02 - Vegetation succession/Biocenotic evolution	8.8	9.4	8.8
4.	J03 - Other changes to ecosystems	7.4	6.8	6.9
5.	A03 - Mowing or cutting grasslands	7.4	6.4	6.7
6.	E01 - Urbanisation and human habitation	4.6	5.4	5.0
7.	J02 - Changes in waterbodies conditions	4.3	4.2	4.2
8.	D01 - Roads, railroads and paths	3.2	3.7	3.6
9.	B01 - Afforestation	3.4	3.7	3.5
10.	B02 - Forest and plantation management and use	3.2	2.9	3.2

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 1 809 and 1 847, respectively. When pressures and threats are considered together, the total number of distinct entries is 2 128. Greece did not provide an Article 17 report.

Table D.5Grassland ecosystems: Top 10 (% of frequency) reported high-ranked
pressures /threats for habitats (see Figure 4.13)

Rank	Level 2 category	Pressures	Threats	Total
1.	A04 - Grazing by livestock	18.8	17.2	17.6
2.	K02 - Vegetation succession/Biocenotic evolution	10.3	11.8	10.6
3.	A03 - Mowing or cutting grasslands	10.1	10.3	9.6
4.	A02 - Modification of cultivation practices	8.0	7.7	7.7
5.	J02 - Changes in waterbodies conditions	7.6	7.3	7.6
6.	A08 - Fertilisation in agriculture	6.1	5.4	5.8
7.	I01 - Invasive alien species	4.5	4.9	4.8
8.	E01 - Urbanisation and human habitation	3.5	3.0	3.3
9.	H04 - Air pollution, airborne pollutants	2.5	3.5	3.0
10.	G05 - Other human intrusions and disturbances	3.0	2.6	2.9

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 1 035 and 1 013, respectively. When pressures and threats are considered together, the total number of distinct entries is 1 155. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Woodland and forest ecosystem

Table D.6Woodland and forest ecosystem: Top 10 (% of frequency) reported-high
ranked pressures/threats for birds (see Figure 4.16)

Rank	Level 2 category	Pressures and Threats
1.	B02 - Forest and plantation management & use	19.7
2.	A02 - Modification of cultivation practices	8.9
3.	J03 - Other changes to ecosystems	6.1
4.	F03 - Hunting and collection of terrestrial wild animals	6.0
5.	A04 - Grazing by livestock	4.4
6.	D02 - Utility and service lines/pipelines	4.1
7.	G01 - Outdoor sports, leisure and recreational activities	4.1
8.	K03 - Interspecific faunal relations	3.7
9.	B03 - Forest exploitation	3.6
10.	A07 - Use of 'pesticides' in agriculture	3.5
10.	A10 - Restructuring agricultural parcels	3.5

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 868. Greece did not provide an Article 12 report.

Table D.7Woodland and forest ecosystem: Top 10 (% of frequency) reported
high-ranked pressures /threats for species (see Figure 4.17)

Rank	Level 2 category	Pressures	Threats	Total
1.	B02 - Forest and plantation management and use	21.8	21.1	20.4
2.	G05 - Other human intrusions and disturbances	7.0	6.7	6.7
3.	J03 - Other changes to ecosystems	6.1	5.9	6.0
4.	E06 - Other urban/industrial developments	6.2	5.2	5.7
5.	A07 - Use of 'pesticides' in agriculture	6.3	6.1	5.5
6.	B03 - Forest exploitation	3.9	4.3	4.7
7.	J02 - Changes in waterbodies conditions	4.9	4.6	4.5
8.	D01 - Roads, railroads and paths	3.6	3.9	3.9
9.	G01 - Outdoor sports, leisure and recreational activities	4.0	3.8	3.7
10.	A02 - Modification of cultivation practices	3.0	2.3	2.8

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 2 835 and 2 993, respectively. When pressures and threats are considered together, the total number of distinct entries is 3 393. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Table D.8Woodland and forest ecosystem: Top 10 (% of frequency) reported
high-ranked pressures /threats for habitats (see Figure 4.18)

Rank	Level 2 category	Pressures	Threats	Total
1.	B02 - Forest and plantation management and use	18.7	15.6	17.2
2.	J02 - Changes in water bodies conditions	12.0	10.9	10.7
3.	K02 - Vegetation succession/Biocenotic evolution	7.8	7.4	7.3
4.	I01 - Invasive alien species	7.1	7.0	6.9
5.	H04 - Air pollution, airborne pollutants	4.5	5.3	4.8
6.	J01 - Fire and fire suppression	4.0	4.8	4.4
7.	K04 - Interspecific floral relations	3.9	4.8	4.4
8.	J03 - Other changes to ecosystems	4.6	4.3	4.2
9.	F03 - Hunting and collection of terrestrial wild animals	4.3	4.2	3.8
10.	B03 - Forest exploitation	2.0	3.1	3.0

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 841 and 889, respectively. When pressures and threats are considered together, the total number of distinct entries is 993. Greece did not provide an Article 17 report.

Wetlands ecosystem

Table D.9Wetlands ecosystem: Top 10 (% of frequency) reported high-ranked
pressures/threats for birds (see Figure 4.21)

Rank	Level 2 category	Pressures and Threats
1.	J02 - Changes in waterbodies conditions	23.3
2.	A02 - Modification of cultivation practices	9.2
3.	J03 - Other changes to ecosystems	7.5
4.	M01 - Abiotic changes (climate change)	6.1
5.	A03 - Mowing or cutting grasslands	5.8
6.	K03 - Interspecific faunal relations	5.3
7.	A04 - Grazing by livestock	4.1
8.	G01 - Outdoor sports, leisure and recreational activities	4.1
9.	F03 - Hunting and collection of terrestrial wild animals	3.5
10.	K02 - Vegetation succession/Biocenotic evolution	3.2

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 1 077. Greece did not provide an Article 12 report.

Source: EEA, 2015a, Article 12 reports and assessments.

Table D.10Wetlands ecosystem: Top 10 (% of frequency) reported high-ranked
pressures /threats for species (see Figure 4.22)

Rank	Level 2 category	Pressures	Threats	Total
1.	J02 - Changes in waterbodies conditions	20.8	20.2	19.9
2.	J03 - Other changes to ecosystems	7.2	7.4	7.2
3.	A02 - Modification of cultivation practices	6.3	5.9	6.1
4.	H01 - Pollution to surface waters	6.2	6.0	5.8
5.	K02 - Vegetation succession/Biocenotic evolution	5.1	5.0	5.2
6.	D01 - Roads, railroads and paths	4.1	4.4	4.1
7.	101 - Invasive alien species	3.8	3.9	3.8
8.	B02 - Forest and plantation management and use	3.6	3.4	3.5
9.	A07 - Use of 'pesticides' in agriculture	3.4	3.2	3.2
10.	K01 - Abiotic natural processes	2.8	2.8	3.0

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 2 631 and 2 742, respectively. When pressures and threats are considered together, the total number of distinct entries is 3 069. Greece did not provide an Article 17 report.

Table D.11Wetlands ecosystem: Top 10 (% of frequency) reported high-ranked
pressures /threats for habitats (see Figure 4.23)

Rank	Level 2 category	Pressures	Threats	Total
1.	J02 - Changes in waterbodies conditions	27.0	25.7	24.7
2.	K02 - Vegetation succession/Biocenotic evolution	11.9	12.4	11.2
3.	A04 - Grazing by livestock	7.9	6.9	7.3
4.	H01 - Pollution to surface waters	6.1	5.0	5.6
5.	C01 - Mining and quarrying	5.6	5.7	5.6
6.	H04 - Air pollution, airborne pollutants	5.0	5.4	4.9
7.	A08 - Fertilisation in agriculture	4.3	4.5	4.4
8.	M01 - Abiotic changes (climate change)	1.3	4.0	3.4
9.	H02 - Pollution to groundwater	2.8	2.8	2.9
10.	A03 - Mowing or cutting grasslands	2.5	2.6	2.4

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 604 and 579, respectively. When pressures and threats are considered together, the total number of distinct entries is 697. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Heathland and shrub ecosystem

Table D.12Heathland and shrub ecosystem: Top 10 (% of frequency) reported
high-ranked pressures/threats for birds (see Figure 4.26)

Rank	Level 2 category	Pressures and threats
1.	A02 - Modification of cultivation practices	16.5
2.	A04 - Grazing by livestock	9.4
3.	J03 - Other changes to ecosystems	8.2
4.	A07 - Use of 'pesticides' in agriculture	5.3
5.	F03 - Hunting and collection of terrestrial wild animals	5.2
6.	A10 - Restructuring agricultural parcels	4.7
7.	B01 - Afforestation	4.7
8.	A03 - Mowing or cutting grasslands	4.4
9.	K02 - Vegetation succession/Biocenotic evolution	4.4
10.	G01 - Outdoor sports, leisure and recreational activities	4.0

Notes: Pressures and threats are reported at level 2. The total number of pressures and threats is 619. Greece did not provide an Article 12 report.

Table D.13Heathland and shrub ecosystem: Top 10 (% of frequency) reported
high-ranked pressures/threats for species (see Figure 4.27)

Rank	Level 2 category	Pressures	Threats	Total
1.	B02 - Forest and plantation management and use	9.2	8.4	8.7
2.	J03 - Other changes to ecosystems	7.5	7.6	7.1
3.	E01 - Urbanisation and human habitation	5.6	5.8	5.3
4.	D01 - Roads, railroads and paths	5.2	5.1	5.2
5.	A02 - Modification of cultivation practices	5.0	4.0	5.0
6.	A04 - Grazing by livestock	4.8	4.0	4.6
7.	F03 - Hunting and collection of terrestrial wild animals	4.7	3.9	4.3
8.	A10 - Restructuring agricultural parcels	4.5	4.1	4.1
9.	A07 - Use of 'pesticides' in agriculture	4.0	3.9	3.4
10.	G01 - Outdoor sports, leisure and recreational activities	3.5	3.5	3.4

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 936 and 944, respectively. When pressures and threats are considered together, the total number of distinct entries is 1 105. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Table D.14Heathland and shrub ecosystem: Top 10 (% of frequency) reported
high-ranked pressures/threats for habitats (see Figure 4.28)

Rank	Level 2 category	Pressures	Threats	Total
1.	A04 - Grazing by livestock	16.0	13.9	14.0
2.	K02 - Vegetation succession/Biocenotic evolution	13.0	13.9	12.4
3.	I01 - Invasive alien species	8.7	7.1	9.3
4.	H04 - Air pollution, airborne pollutants	7.5	8.9	7.3
5.	E01 - Urbanisation and human habitation	7.3	6.6	7.0
6.	J02 - Changes in waterbodies conditions	7.3	5.0	6.7
7.	J01 - Fire and fire suppression	5.1	5.8	4.9
8.	B01 - Afforestation	4.3	3.9	4.3
9.	M01 - Abiotic changes (climate change)	2.4	3.7	3.2
10.	G05 - Other human intrusions and disturbances	3.0	2.5	2.7

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 531 and 519, respectively. When pressures and threats are considered together, the total number of distinct entries is 627. Greece did not provide an Article 17 report.

Sparsely vegetated land ecosystem

Table D.15Sparsely vegetated land ecosystem: Top 10 (% of frequency) reported
high-ranked pressures/threats for birds (see Figure 4.31)

Rank	Level 2 category	Pressures and Threats
1.	K03 - Interspecific faunal relations	9.6
2.	G01 - Outdoor sports, leisure and recreational activities	9.5
3.	J03 - Other changes to ecosystems	8.7
4.	J02 - Changes in waterbodies conditions	7.0
5.	A04 - Grazing by livestock	6.5
6.	A02 - Modification of cultivation practices	5.5
7.	I01 - Invasive alien species	5.4
8.	F03 - Hunting and collection of terrestrial wild animals	4.0
9.	F02 - Fishing and harvesting aquatic resources	3.1
10.	H03 - Pollution to marine waters	2.8
10.	M01 - Abiotic changes (climate change)	2.8

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 1 046. Greece did not provide an Article 12 report.

Source: EEA, 2015a, Article 12 reports and assessments.

Table D.16Sparsely vegetated land ecosystem: Top 10 (% of frequency) reported
high-ranked pressures /threats for species (see Figure 4.32)

Rank	Level 2 category	Pressures	Threats	Total
1.	E01 - Urbanisation and human habitation	8.8	8.5	8.3
2.	A04 - Grazing by livestock	6.6	6.0	5.8
3.	J03 - Other changes to ecosystems	5.9	5.7	5.8
4.	B02 - Forest and plantation management and use	5.7	5.5	5.3
5.	G01 - Outdoor sports, leisure and recreational activities	5.5	5.0	5.3
6.	D01 - Roads, railroads and paths	5.0	5.2	5.2
7.	K02 - Vegetation succession/Biocenotic evolution	4.8	5.3	4.8
8.	E06 - Other urban/industrial developments	4.1	3.5	3.9
9.	G05 - Other human intrusions and disturbances	4.2	3.7	3.8
10.	I01 - Invasive alien species	3.6	4.0	3.7

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 953 and 1 005, respectively. When pressures and threats are considered together, the total number of distinct entries is 1 155. Greece did not provide an Article 17 report.

Table D.17Sparsely vegetated land ecosystem: Top 10 (% of frequency) reported
high-ranked pressures /threats for habitats (see Figure 4.33)

Rank	Level 2 category	Pressures	Threats	Total
1.	G01 - Outdoor sports, leisure and recreational activities	12.7	13.2	12.2
2.	G05 - Other human intrusions and disturbances	10.3	10.0	9.4
3.	C01 - Mining and quarrying	9.3	5.4	8.6
4.	K02 - Vegetation succession/Biocenotic evolution	8.1	8.8	8.0
5.	J02 - Changes in waterbodies conditions	7.8	6.1	6.5
6.	I01 - Invasive alien species	6.1	5.1	5.7
7.	M01 - Abiotic changes (climate change)	2.4	5.1	4.3
8.	J03 - Other changes to ecosystems	4.4	4.6	3.9
9.	E01 - Urbanisation and human habitation	4.2	3.4	3.5
10.	A04 - Grazing by livestock	3.7	3.7	3.5

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 409 and 409, respectively. When pressures and threats are considered together, the total number of distinct entries is 490. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Freshwater ecosystems

Rivers and lakes ecosystem

Table D.18 Rivers and lakes ecosystems: Top 10 (% of frequency) reported high-ranked pressures/threats for birds (see Figure 4.36)

Rank	Level 2 category	Pressures and threats
1.	J02 - Changes in water bodies conditions	22.8
2.	J03 - Other changes to ecosystems	9.2
3.	M01 - Abiotic changes (climate change)	6.7
4.	G01 - Outdoor sports, leisure and recreational activities	6.6
5.	K03 - Interspecific faunal relations	5.8
6.	F03 - Hunting and collection of terrestrial wild animals	4.9
7.	A02 - Modification of cultivation practices	4.6
8.	H01 - Pollution to surface waters	3.6
9.	101 - Invasive alien species	3.2
10.	F01 - Marine and freshwater aquaculture	2.7

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 1 088. Greece did not provide an Article 12 report.

Table D.19Rivers and lakes ecosystem: Top 10 (% of frequency) reported
high-ranked pressures/threats for species (see Figure 4.37)

Rank	Level 2 category	Pressures	Threats	Total
1.	J02 - Changes in waterbodies conditions	27.0	26.2	25.8
2.	J03 - Other changes to ecosystems	12.3	12.9	12.6
3.	H01 - Pollution to surface waters	9.5	9.2	9.1
4.	101 - Invasive alien species	5.8	6.2	5.9
5.	A02 - Modification of cultivation practices	3.4	3.3	3.3
6.	K03 - Interspecific faunal relations	2.9	3.0	3.1
7.	F02 - Fishing and harvesting aquatic resources	2.8	2.8	2.7
8.	A07 - Use of 'pesticides' in agriculture	2.7	2.8	2.7
9.	D01 - Roads, railroads and paths	2.5	2.6	2.5
10.	K02 - Vegetation succession/Biocenotic evolution	2.3	2.2	2.3

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 2 962 and 3 052, respectively. When pressures and threats are considered together, the total number of distinct entries is 3 397. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Table D.20Rivers and lakes ecosystem: Top 10 (% of frequency) reported
high-ranked pressures /threats for habitats (see Figure 4.38)

Rank	Level 2 category	Pressures	Threats	Total
1.	J02 - Changes in waterbodies conditions	29.8	28.7	27.0
2.	H01 - Pollution to surface waters	16.6	14.5	14.6
3.	C01 - Mining and quarrying	6.1	7.0	6.3
4.	A08 - Fertilisation in agriculture	5.4	5.9	6.1
5.	K02 - Vegetation succession/Biocenotic evolution	5.1	5.7	5.9
6.	I01 - Invasive alien species	4.8	5.9	5.5
7.	H02 - Pollution to groundwater	4.8	5.7	5.2
8.	A02 - Modification of cultivation practices	3.4	2.0	3.2
9.	K01 - Abiotic natural processes	3.0	2.9	2.8
10.	G01 - Outdoor sports, leisure and recreational activities	1.8	1.8	2.0

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 610 and 614, respectively. When pressures and threats are considered together, the total number of distinct entries is 710. Greece did not provide an Article 17 report.

Marine ecosystems

Marine inlets and transitional waters ecosystem

Table D.21Marine inlets and transitional waters ecosystems: Top 10 (% of frequency)
reported high-ranked pressures/threats for birds (see Figure 4.41)

Rank	Level 2 category	Pressures and Threats
1.	J03 - Other changes to ecosystems	13.4
2.	F01 - Marine and freshwater aquaculture	10.9
3.	J02 - Changes in waterbodies conditions	9.0
4.	F02 - Fishing and harvesting aquatic resources	8.5
5.	F03 - Hunting and collection of terrestrial wild animals	8.0
6.	G01 - Outdoor sports, leisure and recreational activities	7.5
7.	M01 - Abiotic changes (climate change)	7.0
8.	H03 - Pollution to marine waters	4.5
9.	C01 - Mining and quarrying	4.0
10.	A02 - Modification of cultivation practices	3.5
10.	M02 - Biotic changes (climate change)	3.5

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 201. Greece did not provide an Article 12 report.

Source: EEA, 2015a, Article 12 reports and assessments.

Table D.22 Marine inlets and transitional waters ecosystem: Top 10 (% of frequency) reported high-ranked pressures /threats for species (see Figure 4.42)

Rank	Level 2 category	Pressures	Threats	Total
1.	F02 - Fishing and harvesting aquatic resources	22.0	20.3	20.0
2.	H03 - Pollution to marine waters	9.1	9.8	9.3
3.	J02 - Changes in waterbodies conditions	8.3	7.5	7.3
4.	D03 - Shipping lanes and ports	7.6	7.5	7.3
5.	J03 - Other changes to ecosystems	5.3	5.3	6.7
6.	G01 - Outdoor sports, leisure and recreational activities	6.1	6.8	6.0
7.	F05 - Illegal taking of marine fauna	5.3	5.3	4.7
8.	F01 - Marine and freshwater aquaculture	3.8	2.3	3.3
9.	H01 - Pollution to surface waters	3.8	2.3	3.3
10.	C01 - Mining and quarrying	3.8	3.8	3.3

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 132 and 133, respectively. When pressures and threats are considered together, the total number of distinct entries is 150. Greece did not provide an Article 17 report.

Table D.23Marine inlets and transitional waters ecosystem: Top 10 (% of frequency)
reported high-ranked pressures /threats for habitats (see Figure 4.43)

Rank	Level 2 category	Pressures	Threats	Total
1.	J02 - Changes in waterbodies conditions	19.1	17.7	16.9
2.	F02 - Fishing and harvesting aquatic resources	13.2	12.9	11.9
3.	H01 - Pollution to surface waters	11.5	8.1	10.6
4.	H03 - Pollution to marine waters	5.3	7.0	6.5
5.	I01 - Invasive alien species	4.3	5.4	4.8
6.	D03 - Shipping lanes and ports	4.3	5.1	4.6
7.	E03 - Discharges (household/industrial)	4.3	3.0	3.7
8.	E01 - Urbanisation and human habitation	3.6	3.8	3.7
9.	G01 - Outdoor sports, leisure and recreational activities	3.3	3.8	3.5
10.	M01 - Abiotic changes (climate change)	1.3	4.0	3.5

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 393 and 372, respectively. When pressures and threats are considered together, the total number of distinct entries is 461. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Coastal ecosystem

Table D.24Coastal ecosystem: Top 10 (% of frequency) reported high-ranked
pressures/threats for birds (see Figure 4.46)

Rank	Level 2 category	Pressures and Threats
1.	F02 - Fishing and harvesting aquatic resources	20.1
2.	H03 - Pollution to marine waters	19.5
3.	J03 - Other changes to ecosystems	12.1
4.	F01 - Marine and freshwater aquaculture	8.7
5.	M02 - Biotic changes (climate change)	6.7
6.	M01 - Abiotic changes (climate change)	4.7
7.	C03 - Production of renewable energy (abiotic)	4.0
8.	G01 - Outdoor sports, leisure and recreational activities	4.0
9.	J02 - Changes in water bodies conditions	4.0
10.	F03 - Hunting and collection of terrestrial wild animals	3.4

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 149. Greece did not provide an Article 12 report.

Table D.25Coastal ecosystem: Top 10 (% of frequency) reported high ranked
pressures/threats for species (see Figure 4.47)

Rank	Level 2 category	Pressures	Threats	Total
1.	F02 - Fishing and harvesting aquatic resources	27.2	26.1	25.6
2.	H03 - Pollution to marine waters	16.3	16.0	15.6
3.	D03 - Shipping lanes and ports	6.7	7.1	6.9
4.	G01 - Outdoor sports, leisure and recreational activities	5.4	5.5	5.3
5.	F06 - Other hunting, fishing and collection activities	5.4	4.6	5.0
6.	J03 - Other changes to ecosystems	3.8	3.8	4.6
7.	H01 - Pollution to surface waters	4.6	3.8	4.2
8.	F05 - Illegal taking of marine fauna	4.6	4.6	4.2
9.	H06 - Excess energy (noise, light, heating, electromagnetic)	3.3	4.2	3.8
10.	G05 - Other human intrusions and disturbances	3.3	3.4	3.4

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 239 and 238, respectively. When pressures and threats are considered together, the total number of distinct entries is 262. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Table D.26Coastal ecosystem: Top 10 (% of frequency) reported high-ranked
pressures/threats for habitats (see Figure 4.47)

Rank	Level 2 category	Pressures	Threats	Total
1.	F02 - Fishing and harvesting aquatic resources	23.1	22.9	21.3
2.	H03 - Pollution to marine waters	9.3	11.8	10.9
3.	J02 - Changes in waterbodies conditions	10.4	10.6	9.0
4.	H01 - Pollution to surface waters	9.3	5.9	8.1
5.	J03 - Other changes to ecosystems	7.1	1.8	6.2
6.	G01 - Outdoor sports, leisure and recreational activities	5.5	7.1	5.7
7.	I01 - Invasive alien species	4.4	5.3	4.7
8.	E03 - Discharges (household/industrial)	4.9	2.9	4.3
9.	G05 - Other human intrusions and disturbances	4.9	4.7	4.3
10.	D03 - Shipping lanes and ports	3.3	4.7	4.3

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 182 and 170, respectively. When pressures and threats are considered together, the total number of distinct entries is 211. Greece did not provide an Article 17 report.

Shelf

Table D.27Shelf ecosystem: Top 10 (% of frequency) reported high-ranked
pressures/threats for birds (see Figure 4.51)

Rank	Level 2 category	Pressures and Threats
1.	H03 - Pollution to marine waters	33.3
2.	F02 - Fishing and harvesting aquatic resources	30.0
3.	C03 - Production of renewable energy (abiotic)	8.3
4.	M02 - Biotic changes (climate change)	6.7
5.	D03 - Shipping lanes and ports	5.0
6.	H01 - Pollution to surface waters	5.0
7.	F06 - Other hunting, fishing and collection activities	3.3
8.	J03 - Other changes to ecosystems	3.3
9.	F01 - Marine and freshwater aquaculture	1.7
10.	F03 - Hunting and collection of terrestrial wild animals	1.7
10.	XO - Threats and pressures from outside the Member State	1.7

Notes: Pressures and threats are reported at level 2. The total number of pressures and threats is 60. Greece did not provide an Article 12 report.

Source: EEA 2015a, Article 12 reports and assessments

Table D.28Shelf ecosystem: Top 10 (% of frequency) reported high-ranked
pressures /threats for species (see Figure 4.52)

Rank	Level 2 category	Pressures	Threats	Total
1.	F02 - Fishing and harvesting aquatic resources	30.3	28.6	28.4
2.	H03 - Pollution to marine waters	19.7	17.6	17.8
3.	D03 - Shipping lanes and ports	6.2	7.1	6.6
4.	H06 - Excess energy (noise, light, heating, electromagnetic)	5.1	6.6	6.1
5.	H01 - Pollution to surface waters	4.5	3.8	4.1
6.	F06 - Other hunting, fishing and collection activities	4.5	4.4	4.1
7.	G01 - Outdoor sports, leisure and recreational activities	3.9	3.3	3.6
8.	G05 - Other human intrusions and disturbances	3.9	3.8	3.6
9.	J03 - Other changes to ecosystems	3.4	2.7	3.6
10.	M01 - Abiotic changes (climate change)	1.7	3.3	3.0

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 178 and 182, respectively. When pressures and threats are considered together, the total number of distinct entries is 197. Greece did not provide an Article 17 report.

Table D.29Shelf ecosystem: Top 10 (% of frequency) reported high-ranked
pressures /threats for habitats (see Figure 4.53)

Rank	Level 2 category	Pressures	Threats	Total
1.	F02 - Fishing and harvesting aquatic resources	25.0	26.7	23.4
2.	H03 - Pollution to marine waters	9.5	13.3	10.6
3.	J03 - Other changes to ecosystems	9.5	1.3	8.5
4.	G01 - Outdoor sports, leisure and recreational activities	8.3	10.7	8.5
5.	G05 - Other human intrusions and disturbances	8.3	8.0	7.4
6.	J02 - Changes in waterbodies conditions	8.3	8.0	7.4
7.	H01 - Pollution to surface waters	6.0	2.7	5.3
8.	I01 - Invasive alien species	3.6	2.7	3.2
9.	H04 - Air pollution, air-borne pollutants	3.6	4.0	3.2
10.	M01 - Abiotic changes (climate change)	2.4	2.7	3.2

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 84 and 75, respectively. When pressures and threats are considered together, the total number of distinct entries is 94. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

Open ocean ecosystem

Table D.30Open ocean ecosystem: Top 6 (% of frequency) reported high-ranked
pressures/threats for birds (see Figure 4.56)

Rank	Level 2 category	Pressures and Threats
1.	H03 - Pollution to marine waters	47.1
2.	F02 - Fishing and harvesting aquatic resources	29.4
3.	H01 - Pollution to surface waters	5.9
4.	J03 - Other changes to ecosystems	5.9
5.	M02 - Biotic changes (climate change)	5.9
6.	XO - Threats and pressures from outside the Member State	5.9

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 17. Greece did not provide an Article 12 report.

Table D.31Open ocean ecosystem: Top 10 (% of frequency) reported high-ranked
pressures /threats for species (see Figure 4.57)

Rank	Level 2 category	Pressures	Threats	Total
1.	F02 - Fishing and harvesting aquatic resources	20.0	15.3	15.1
2.	H03 - Pollution to marine waters	18.2	15.3	15.1
3.	G04 - Military use and civil unrest	12.7	15.3	15.1
4.	D03 - Shipping lanes and ports	10.9	13.9	13.7
5.	H06 - Excess energy (noise, light, heating, electromagnetic)	9.1	9.7	9.6
6.	G05 - Other human intrusions and disturbances	7.3	8.3	8.2
7.	J03 - Other changes to ecosystems	7.3	8.3	8.2
8.	F06 - Other hunting, fishing and collection activities	3.6	2.8	2.7
9.	XO - Threats and pressures from outside the Member State	1.8	1.4	2.7
10.	M02 - Biotic changes (climate change)	1.8	1.4	1.4
10.	G01 - Outdoor sports, leisure and recreational activities	1.8	1.4	1.4
10.	H01 - Pollution to surface waters	1.8	1.4	1.4
10.	K03 - Interspecific faunal relations	1.8	1.4	1.4
10.	M01 - Abiotic changes (climate change)	1.8	1.4	1.4
10.	G02 - Sport and leisure infrastructures	0.0	1.4	1.4
10.	XE - Threats and pressures from outside the EU territory	0.0	1.4	1.4

Notes: These are species from the Habitats Directive. Pressures and threats are reported at Level 2. The total number of pressures and threats is 55 and 72, respectively. When pressures and threats are considered together, the total number of distinct entries is 73. Greece did not provide an Article 17 report.

Table D.32Open ocean ecosystem: Top 10 (% of frequency) reported high-ranked
pressures /threats for habitats (see Figure 4.58)

Rank	Level 2 category	Pressures	Threats	Total
1.	F02 - Fishing and harvesting aquatic resources	17.1	19.4	17.4
2.	G01 - Outdoor sports, leisure and recreational activities	14.6	19.4	15.2
3.	H03 - Pollution to marine waters	12.2	16.7	13.0
4.	J03 - Other changes to ecosystems	9.8	0	8.7
5.	J02 - Changes in water bodies conditions	9.8	8.3	8.7
6.	G05 - Other human intrusions and disturbances	7.3	8.3	6.5
7.	E03 - Discharges (household/industrial)	4.9	2.8	4.3
8.	I01 - Invasive alien species	4.9	2.8	4.3
9.	E01 - Urbanisation and human habitation	4.9	5.6	4.3
10.	K01 - Abiotic natural processes	2.4	2.8	2.2
10.	D03 - Shipping lanes and ports	2.4	2.8	2.2
10.	F06 - Other hunting, fishing and collection activities	2.4	2.8	2.2
10.	H01 - Pollution to surface waters	2.4	2.8	2.2
10.	L05 - Collapse of terrain, landslide	2.4	0	2.2
10.	M01 - Abiotic changes (climate change)	2.4	0	2.2
10.	F05 - Illegal taking of marine fauna	0	2.8	2.2
10.	M02 - Biotic changes (climate change)	0	2.8	2.2

Notes: Pressures and threats are reported at Level 2. The total number of pressures and threats is 41 and 36, respectively. When pressures and threats are considered together, the total number of distinct entries is 46. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments.

MAES ecosystem type (no of assessments)	Secure	Unknown	Near threatened, declining or depleted	Threatened
Open ocean (8)	75.0	0	0	25.0
Woodland and forest (151)	64.2	13.9	12.6	9.3
Shelf (15)	60.0	0	0	40.0
Marine inlets and transitional waters (47)	59.6	2.1	17.0	21.3
Coastal (37)	59.5	0	10.8	29.7
Rivers and lakes (128)	59.4	11.7	14.8	14.1
Wetlands (127)	54.3	13.4	17.3	15.0
Cropland (78)	50.0	17.9	20.5	11.5
Grassland (75)	46.7	9.3	21.3	22.7
Heathland and shrub (95)	43.2	15.8	23.2	17.9
Sparsely vegetated land (165)	43.0	17.0	15.2	24.8

Note: The number of assessments is indicated in parentheses. The total number of assessments is 926. Greece did not provide an Article 12 report.

Table D.34 Conservation status of habitats and species (merged), per MAES ecosystem type (figure 4.2)

MAES ecosystem type (no of assessments)	Favourable	Unfavourable- inadequate	Unfavourable- bad	Unknown
Sparsely vegetated land (655)	31.0	37.4	11.6	20.0
Heathland and shrub (510)	27.6	40.4	14.9	17.1
Woodland and forest (871)	23.0	46.6	18.5	11.9
Wetlands (589)	20.9	44.5	24.6	10.0
Cropland (50)	20.0	50.0	20.0	10.0
Grassland (767)	18.5	44.9	23.5	13.2
Rivers and lakes (709)	17.3	46.3	27.4	9.0
Coastal (81)	16.0	22.2	24.7	37.0
Shelf (69)	13.0	15.9	17.4	53.6
Marine inlets and transitional waters (86)	11.6	36.0	33.7	18.6
Open ocean (72)	5.6	12.5	2.8	79.2

Note: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 4 459. Greece did not provide an Article 17 report.

Source: EEA, 2015b, Article 17 reports and assessments

Table D.35Short-term population trends of bird, per MAES ecosystem type (see
Figure 4.3)

MAES ecosystem type (number of assessments)	Increasing	Uncertain/Unknown	Stable/Fluctuating	Decreasing
Open ocean (8)	50.0	0	0	50.0
Woodland and forest (151)	34.4	13.9	23.8	27.8
Marine inlets and transitional waters (47)	31.9	8.5	17.0	42.6
Sparsely vegetated land (165)	30.3	17.6	20.6	31.5
Rivers and lakes (128)	27.3	13.3	28.9	30.5
Wetlands (127)	26.8	18.1	23.6	31.5
Shelf (15)	26.7	0	20.0	53.3
Grassland (75)	25.3	6.7	22.7	45.3
Cropland (78)	24.4	14.1	23.1	38.5
Coastal (37)	24.3	2.7	21.6	51.4
Heathland and shrub (95)	20.0	18.9	26.3	34.7

Notes: The number of assessments is indicated in parentheses. The total number of assessments is 926. Greece did not provide an Article 12 report.

Table D.36 Conservation status and trends of habitats and species (merged) assessed as unfavourable, per MAES ecosystem type (see Figure 4.4)

MAES ecosystem type (no of assessments)	Favourable	Unfavourable- improving	Unfavourable- unknown-trend	Unknown	Unfavourable- stable	Unfavourable- declining
Sparsely vegetated land (655)	31.0	3.7	12.8	20.0	18.6	13.9
Heathland and shrub (510)	27.6	3.3	14.7	17.1	20.6	16.7
Woodland and forest (871)	23.0	4.9	13.2	11.9	27.1	19.9
Wetlands (589)	20.9	3.9	13.9	10.0	21.9	29.4
Cropland (50)	20.0	6.0	10.0	10.0	24.0	30.0
Grassland (767)	18.5	3.9	15.3	13.2	24.3	24.9
Rivers and lakes (709)	17.3	5.4	11.6	9.0	22.4	34.3
Coastal (81)	16.0	6.2	9.9	37.0	14.8	16.0
Shelf (69)	13.0	2.9	11.6	53.6	8.7	10.1
Marine inlets and transitional waters (86)	11.6	8.1	10.5	18.6	22.1	29.1
Open ocean (72)	5.6	0	11.1	79.2	2.8	1.4

Notes: These are species from the Habitats Directive. The number of assessments is indicated in parentheses. The total number of assessments is 4 459. Greece did not provide an Article 17 report.

Annex E (Chapter 5)

Table E.1Area and coverage (%) of proposed SCIs, SCIs, SACs and SPAs as reported by Member States as part of the Articles 12
and 17 reporting (2007-to-2012)

		Area	of SCIs (km2)			Area	of SACs (km2)			Area	of SPAs (km2)	
Member State			Total	Terrestrial			Total	Terrestrial			Total	Terrestrial
	Terrestrial	Marine	(terrestrial + marine)	Coverage (%)	Terrestrial	Marine	(terrestrial + marine)	Coverage (%)	Terrestrial	Marine	(terrestrial + marine)	Coverage (%)
Austria	8 995.3		8 995.3	10.7	6 219.3		6 219.3	7.4	10 110	0	10 110	12.1
Belgium	3 282	1119	4 401	10.8	37		37	0.1	2 969.6	311.1	3 280.8	9.7
Bulgaria	33 270.4	611.1	33 881.5	30.0	0	0	0	0	25 104.6	544.7	25 649.3	22.6
Cyprus	752.3	130.2	882.4	13.1	64.2	0	64.2	1.1	1 532.8	109.7	1 642.4	26.7
Czech Republic	7 855.7	0	7 855.7	10.0	2 964.4	0	2 964.4	3.8	7 034	0	7 034	8.9
Germany	33 230.7	21 221.6	54 452.3	9.3	27 456.5	8543.2	35 999.8	7.7	40 095.8	19 862.0	59 957.8	11.2
Denmark			19 575	0.0			18 243	0	2 600	12 100	14 700	6.0
Estonia	7 639	3 911	11 550	16.9			10 013	0	6 163	6 495	12 658	13.6
Spain	117 899	9 491	127 390	23.4	4 069	4 140	8 209	0.8	101 121	2 626	103 747	20.0
Finland	42 290	6 149	48 439	12.5				0	24 559	6 291	30 850	7.3
France	46 832	27 705	74 537	8.5	23 528	4 527	28 055	4.3	43 638.4	35 251.1	78 889.5	7.9
Hungary	14 443.6	0	14 443.6	15.5	14 437.1	0	14 437.1	15.5	13 746	0	13 746	14.8
Ireland	7 092	6 476	13 568	10.1	0	0	0	0	4 153.6	1 593.0	5 746.6	5.9
Italy	72 184	6 348	78 532	24.0	0	0	0	0	41 259.6	2 847.1	44 106.7	13.7
Lithuania	8 416.4	146.6	8 563.0	12.9	1 521.1	0	1 521.1	2.3	5 606.7	295.9	5 902.6	8.6
Luxembourg	414	0	414	15.9	414	0	414	15.9	141.6	0	141.6	5.5
Latvia	7 877.3	4 364.1	12 241.4	12.2	7 877.3	4 364.1	12 241.4	12.2	6 183.9	425.7	6 609.6	9.6
Malta	42	191	233	13.3	0	0	0	0	16	0	16	5.1
Netherlands	3 864	11 026	14 890	9.3	1 341	4 982	6 323	3.2	5 604	4 955	10 559	13.5

		Area	of SCIs (km2)			Area	of SACs (km2)		Area of SPAs (km2)				
Member State			Total	Terrestrial			Total	Terrestrial			Total	Terrestrial	
	Terrestrial	Marine	(terrestrial + marine)	Coverage (%)	Terrestrial	Marine	(terrestrial + marine)	Coverage (%)	Terrestrial	Marine	(terrestrial + marine)	Coverage (%)	
Poland	33 832	4 330	38 162	10.8	0	0	0	0	48 520	7 231	55 751	15.5	
Portugal	16 130.3	714.0	16 844.3	17.5	729	85	814	0.8	9 930.8	1 555.5	11 486.2	10.8	
Romania	39 794	1 571	41 365	16.7				0	35 542.5	1 401.4	36 943.9	14.9	
Sweden	62 003.5	4 142.2	66 145.7	14.9	61 658.8	1 337.7	62 996.4	14.9	26 050	4 020	30 070	6.3	
Slovenia	6 396.9	0.4	6 397.4	31.6	6 396.9	0.4	6 397.4	31.6	4 615.3	2.9	4 618.2	22.8	
Slovakia	5 843.5	0	5 843.5	12.0	3 849.3	0	3 849.3	7.9	12 828.1	0	12 828.1	26.3	
United Kingdom	12 388	67 678	80 066	5.1	12 340	13 979	26 319	5.0	15 375.8	12 711.4	28 087.2	6.3	
EU-27	592 768.0	177 325.2	789 668.1	13.8	174 902.9	41 958.4	245 117.3	4.1	494 502.0	120 629.4	615 131.4	11.5	

Notes: Empty value means no data were reported by Member States, whereas 0 is a value reported by Member States. Denmark did not report site areas separately for marine and terrestrial categories. Note that these data come from Articles 12 and 17 reports and do not always match with data recorded in the Natura 2000 database (as shown on table E.2). Greece did not provide an Article 12 nor an Article 17 report.

Source: EEA, 2015a, Article 12 reports and assessments. and EEA, 2015b, Article 17 reports and assessments.

	Nu	mber of si	ites (terr	estrial +	marine)			Are	ea (km²) (terre	estrial + marir	ne)	
		SCI			SPA			SCI			SPA	
Member State	2006	2012	+/-	2007	2012	+/-	2006	2012	+/-	2007	2012	+/-
Austria	165	169	4	98	97	-1	8 884.92	8 990.04	105.12	9 744.25	10 108.43	364.19
Belgium	278	280	2	234	234	0	3 220.88	4 190.69	969.81	3 281.62	3 281.45	-0.17
Bulgaria		231	231	88	118	30		33 867.45	33867.45	12 550.70	25 638.35	13 087.66
Cyprus	36	40	4	7	29	22	711.25	883.14	171.89	788.10	1 592.95	804.85
Czech Republic	864	1 075	211	38	41	3	7 244.13	7 855.97	611.84	6 936.19	7 034.43	98.24
Germany	4 616	4 617	1	568	740	172	53 292.28	54 421.52	1129.24	48 101.76	59 953.15	11 851.38
Denmark	254	261	7	113	113	0	11 135.95	19 670.12	8534.17	14 708.94	14 788.94	80.00
Estonia	509	542	33	67	65	-2	10 591.08	11 550.33	959.25	12 591.83	12 637.00	45.17
Spain	1 380	1 448	68	560	597	37	119 112.13	127 349.78	8237.65	97 010.03	103 365.77	6 355.74
Finland	1 715	1 695	-20	467	468	1	48 551.64	55 355.20	6803.56	30 836.33	31 081.34	245.01
France	1 305	1 368	63	371	386	15	48 942.37	74 639.63	25697.26	46 193.71	78 710.00	32 516.29
Greece	237	241	4	149	202	53	27 448.10	28 077.87	629.77	13 584.14	29 527.38	15 943.24
Hungary	467	479	12	55	56	1	13 929.21	14 443.70	514.49	13 519.12	13 745.73	226.61
Ireland	413	426	13	131	166	35	10 560.74	13 540.81	2980.07	2 814.80	5 871.51	3 056.71
Italy	2 286	2 299	13	589	609	20	44 978.81	48 282.20	3303.39	43 797.77	44 021.93	224.15
Lithuania	267	405	138	77	82	5	6 663.58	6 663.38	-0.20	5 435.06	5 903.40	468.34
Luxembourg	47	49	2	12	13	1	383.11	413.64	30.53	139.03	141.57	2.53
Latvia	331	327	-4	98	97	-1	7 651.27	11 215.91	3564.64	6 765.70	9 011.09	2 245.39
Malta	27	32	5	12	13	1	48.21	233.00	184.79	14.34	16.55	2.20
Netherlands	141	142	1	77	74	-3	7 510.00	14 822.69	7312.69	10 125.32	10 441.70	316.38
Poland	192	845	653	124	145	21	13 123.86	38 175.28	25051.43	50 406.64	55 771.32	5 364.69
Portugal	94	95	1	50	59	9	16 502.94	16 557.19	54.25	9 956.44	11 483.97	1 527.53
Romania		383	383		148	148		41 468.65	41468.65		36 977.73	36 977.73
Sweden	3 981	3 975	-6	530	544	14	62 556.51	66 149.80	3593.29	28 872.34	30 073.56	1 201.22

 Table E.2
 Number and area of SCIs and SPAs recorded in the Natura 2000 database, per year between 2006 and 2012

	Nu	mber of s	ites (terr	estrial +	marine)			Are	ea (km²) (terro	estrial + marine)				
		SCI			SPA			SCI			SPA			
Member State	2006	2012	+/-	2007	2012	+/-	2006	2012	+/-	2007	2012	+/-		
Slovenia	259	260	1	27	26	-1	6 359.62	6 397.85	38.23	4 655.92	4 618.50	-37.42		
Slovakia	382	473	91	38	41	3	5 739.36	5 838.14	98.78	12 236.15	13 110.51	874.36		
United Kingdom	613	651	38	265	269	4	25 108.92	80 065.82	54956.90	15 987.85	27 121.67	11 133.82		
EU-27	20 859	22 808	1 949	4 845	5 432	587	560 250.86	791 119.79	230868.92	501 054.08	646 029.92	144 975.84		

Notes: Natura 2000 site codes with the code type 'C' (area of SCI is the same as the SPA) are considered in both statistics for SCI and SPA.

Source: Natura 2000 databases for end 2006, end 2007 and end 2012 (see http://www.eea.europa.eu/data-and-maps/data/natura-5).

	Natura 20	00	SCI		SPA	
Ecosystem type	Area [km ²]	%	Area [km ²]	%	Area [km ²]	%
Woodland and forest	421 895.1	48.8	270 084.1	51.4	210 449.8	45.5
Cropland	147 545.0	17.1	64 738.8	12.3	94 048.2	20.3
Grassland	101 838.0	11.8	55 690.7	10.6	54 540.7	11.8
Heathland and shrub	70 768.5	8.2	50 395.7	9.6	38 689.0	8.4
Rivers and lakes	39 925.3	4.6	26 177.1	5.0	20 325.7	4.4
Wetlands	37 274.3	4.3	27 998.3	5.3	19 871.5	4.3
Sparsely vegetated land	36 753.1	4.3	26 005.8	4.9	20 047.9	4.3
Urban	5 043.8	0.6	2 627.4	0.5	2 675.8	0.6
Marine inlets and transitional waters	3 205.3	0.4	1 708.6	0.3	2 024.8	0.4

Table E.3Land cover of the terrestrial part of Natura 2000 by MAES ecosystem
groups (based on Corine Land Cover 2006)

Annex F (Chapter 6)

Table F.1Proportion of habitats and species in each change class, including
Favourable assessments (see Table 6.2)

		Hab	itats	Species		
Type of change		No of	% of	No of	% of	
		assessments	assessments	assessments	assessments	
A (favourable)	+	0	0	11	0.4	
A (favourable)	Η	132	16.4	605	22.7	
B (unfavourable-improving)	+	35	4.4	126	4.7	
C (unfavourable-deteriorating)	-	244	30.3	582	21.8	
D (unfavourable-stable)	=	339	42.2	887	33.3	
D (unknown-no change)	х	46	5.7	428	16.1	
E (became unknown)	х	8	1.0	26	1.0	

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